XR-CA800

SERVICE MANUAL

AEP Model
UK Model

Ver 1.1 2001.05

Model Name Using Similar Mechanism	XR-C5300R
Tape Transport Mechanism Type	MG-25G-136

SPECIFICATIONS

Cassette Player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 18,000 Hz
Signal-to-noise ratio	

Cassette type	
TYPE II, IV	61 dB
TYPE I	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	
	0.6 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Audio outputs (Rear) Power aerial relay control lead Power amplifier control lead
Inputs	Telephone ATT control lead BUS control input connector BUS audio input connector Remote controller input connector Aerial input connector
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Loudness	100 Hz +8 dB 10 kHz +2 dB
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178× 50× 176 mm (w/h/d)
Mounting dimensions	Approx. 182× 53× 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X5S Card remote commander RM-X116

Note
This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

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2001E0500-1
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Sony Corporation
e Vehicle Company
Shinagawa Tec Service Manual Production Group

SONY®

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Notes on chip component replacement

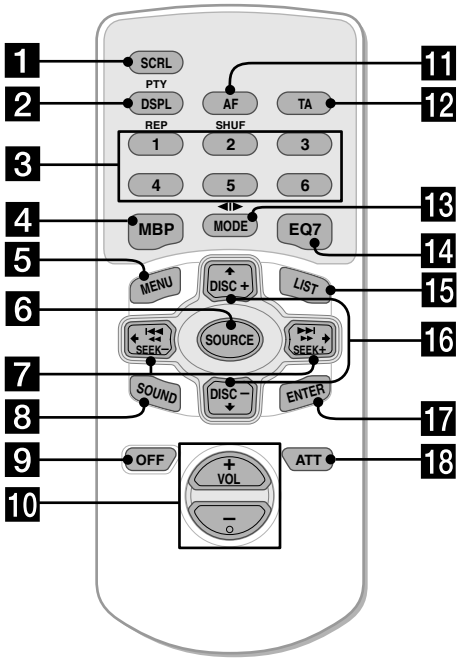
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

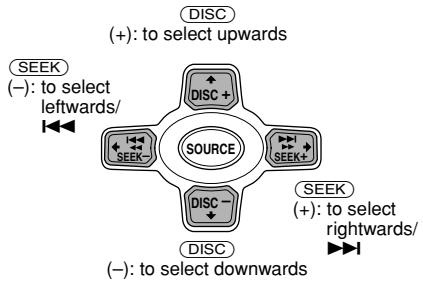
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Location of controls

Card remote commander RM-X116



Refer to the pages listed for details.
TAPE : During tape playback
RADIO : During radio reception
MENU : During menu mode
CD/MD : During CD/MD playback (optional)

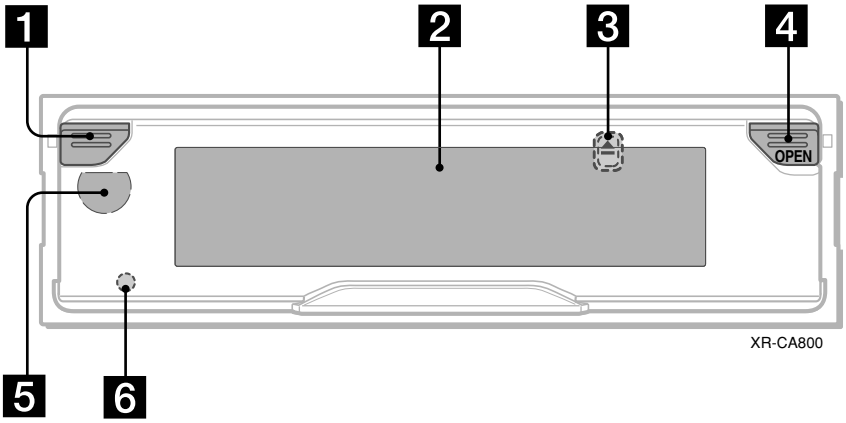


In menu mode, the currently selectable button (s) of these four are indicated with a "▲" in the display.

Tip
Refer to "Replacing the lithium battery" for details on how to replace the batteries (page 25).

1 SCRL button 21
2 DSPL/PTY (display mode change/ programme type) button 12, 15, 21, 23
3 Number buttons
TAPE
① **REP** 9
RADIO 10, 11, 13, 14
CD/MD
① **REP** 22
② **SHUF** 22
4 MBP button 19
5 MENU button 8, 9, 10, 14, 15, 19, 20, 22, 23, 24
6 SOURCE (Power on/Tape/Radio/CD/ MD) button 9, 10, 11, 13, 20, 21, 23
7 SEEK buttons (–/+)
TAPE 9
RADIO 10, 11, 13
MENU 8, 9, 15, 18, 19, 20, 24
CD/MD 21, 22, 24
8 SOUND button 18, 19
9 OFF (Stop/Power off) button 5, 7, 9, 21
10 VOL buttons (+/–) 13
11 AF button 12, 14
12 TA button 13, 14
13 MODE (◄I►) button
TAPE 9
RADIO 10, 11, 13
CD/MD 21, 23
14 EQ7 button 20
15 LIST button
RADIO 11
CD/MD 23
16 DISC buttons (+/–)
RADIO 10, 11, 15
MENU 8, 9, 10, 14, 15, 19, 20, 22, 23, 24
CD/MD 21, 22, 23
17 ENTER button
RADIO 11, 14, 15
MENU 8, 9, 10, 15, 19, 20, 22, 23, 24
CD/MD 23, 24
18 ATT button 18

Main unit



1 Power on/off button* 7
2 Display window
3 ⏏ (eject) button (located on the front side of the unit, behind the front panel) 9
4 OPEN button 7, 9
5 Receptor for the card remote commander
6 RESET button (located on the front side of the unit, behind the front panel) 7

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press the power on/off button on the unit (or OFF on the card remote commander or the rotary commander) for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and this causes battery drain.
To turn the unit on, press the power on/off button (1) on the unit.

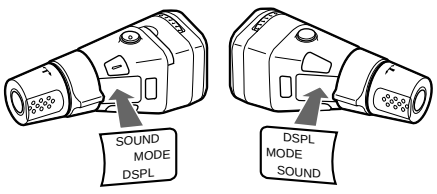
Note
If the unit is turned off by pressing the power on/off button on the unit (or OFF on the card remote commander or the rotary commander) for 2 seconds, it cannot be operated with the card remote commander or the rotary commander unless the power on/off button on the unit is pressed, or a cassette is inserted to activate the unit first.

Other Functions

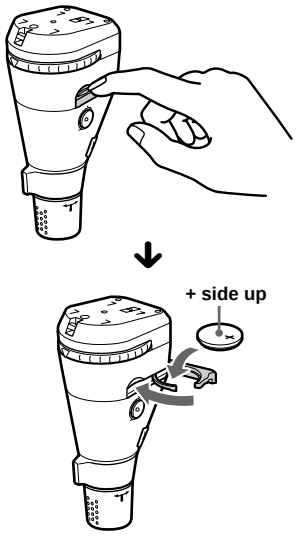
You can also control the unit (and optional CD/MD units) with a rotary commander.
RM-X5S (supplied)/RM-X4S (optional)

Using the rotary commander

First, attach the appropriate label depending on how you want to mount the rotary commander. The rotary commander works by pressing buttons and/or rotating controls.

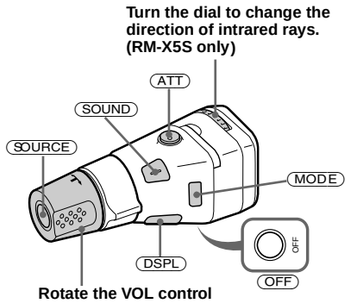


Inserting the supplied lithium battery (RM-X5S only)



Tip
For information on lithium battery, refer to "Notes on lithium battery" (page 25).

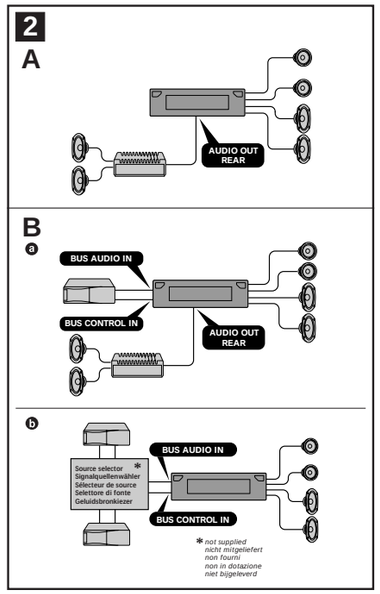
By pressing buttons

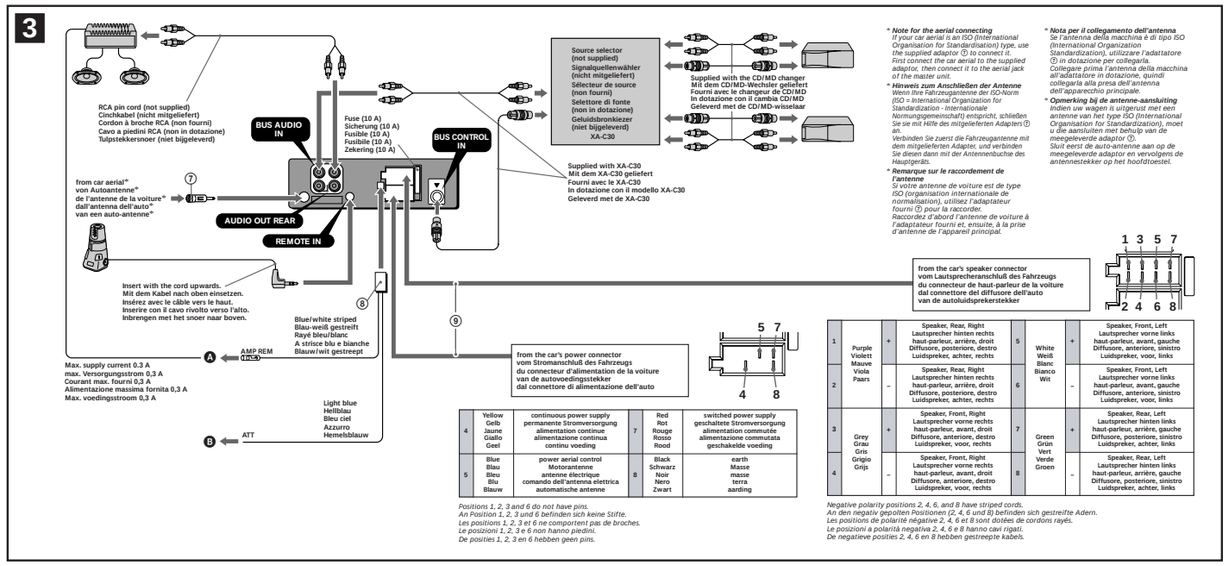


Press	To
SOURCE	Change source (radio/CD*1/MD*1/Tape)
MODE	Change operation (radio band/CD unit*1/MD unit*1/tape playback direction)
ATT	Attenuate sound
OFF *2	Stop playback or radio reception
SOUND	Adjust the sound menu
DSPL	Change the display item

*1 *Only if the corresponding optional equipment is connected.*

*2 *If your car has no ACC (accessory) position on the ignition key switch, be sure to press OFF for 2 seconds to turn off the clock indication after turning off the ignition.*
To turn the unit on, press the power on/off button on the unit.




3
RCA pin cord (not supplied)
Cinchkabel (nicht mitgeliefert)
Cordon à broche RCA (non fourni)
Cavo a piedini RCA (non in dotazione)
Tulpstekersnoer (niet bijgeleverd)
BUS AUDIO IN
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
BUS CONTROL IN
Source selector (not supplied)
Signalquellenwähler (nicht mitgeliefert)
Sélecteur de source (non fourni)
Selettore di fonte (non in dotazione)
Geluidsbronkiezer (niet bijgeleverd)
XA-C30
Supplied with the CD/MD changer
Mit dem CD/MD-Wechsler geliefert
Fourni avec le changeur de CD/MD
In dotazione con il cambia CD/MD
Geleverd met de CD/MD-wisselaar
Supplied with XA-C30
Mit dem XA-C30 geliefert
Fourni avec le XA-C30
In dotazione con il modello XA-C30
Geleverd met de XA-C30
from car aerial*
von Autoantenne*
de l'antenne de la voiture*
dall'antenna dell'auto*
van een auto-antenne*
AUDIO OUT REAR
REMOTE IN
Insert with the cord upwards.
Mit dem Kabel nach oben einsetzen.
Insérez avec le câble vers le haut.
Inserire con il cavo rivolto verso l'alto.
Inbrengen met het snoer naar boven.
Blue/white striped
Blau-weiß gestreift
Rayé bleu/blanc
A strisce blu e bianche
Blauw/wit gestreept
AMP REM
Max. supply current 0,3 A
max. Versorgungsstrom 0,3 A
Courant max. fourni 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
Light blue
Hellblau
Bleu ciel
Azzurro
Hemelsblauw
ATT
from the car's power connector
vom Stromanschluß des Fahrzeugs
du connecteur d'alimentation de la voiture
van de autovoedingsstekker
dal connettore di alimentazione dell'auto
from the car's speaker connector
vom Lautsprecheranschluß des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore dell'uscite dell'auto
van de autoluidsprekerstekker
* Note for the aerial connecting
If your car aerial is an ISO (International Organisation for Standardization) type, use the supplied adaptor Ⓕ to connect it.
First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
* Hinweis zum Anschließen der Antenne
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters Ⓕ an.
Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter, und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
* Remarque sur le raccordement de l'antenne
Si votre antenne de voiture est de type ISO (organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓕ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
* Nota per il collegamento dell'antenna
Se l'antenna della macchina è di tipo ISO (International Organization Standardization), utilizzare l'adattatore Ⓕ in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
* Opmerking bij de antenne-aansluiting
Indien uw wagen is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adaptor Ⓕ.
Sluit eerst de auto-antenne aan op de meegeleverde adaptor en vervolgens de antennestekker op het hoofdtoestel.
1 3 5 7
2 4 6 8

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantenne antenne électrique comando dell'antenna elettrica automatische antenne	
7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding	
8	Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding	

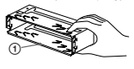
Positions 1, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De negatieve posities 2, 4, 6 en 8 hebben gestreepte kabels.

Parts list (1)

The numbers in the list are keyed to those in the instructions.

Caution
Handle the bracket ① carefully to avoid injuring your fingers.



Connection example (2)

***Notes* (2-A,-B-)**
- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

***Tip* (2-B-)**
For connecting two or more changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

A To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

B To the interface cable of a car telephone

Warning
If you have a power aerial without a relay box, connecting this unit with the power connecting cord Ⓑ may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation), AF (Alternative Frequency) or the TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g, seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- If the power connector of your car does not match the connector on the unit, use the power connecting cord Ⓑ.
- Connect the power connecting cord Ⓑ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

Notes on the power supply cord (yellow)
- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Power connection

Power connectors may vary depending on the car. Check your car's power connector diagram to make sure the connections match correctly. There are two basic types. You may need to switch the positions of the jump connector. Before connecting the unit to the car's power supply, be sure to match the position of the jump connector to that of the pin order. If the power connector of your car does not match the connector on the unit, use the power connecting cord Ⓑ. If you have any questions or problems connecting your unit that are not covered in this manual, please consult the car dealer.

WARNING

Shifting the fuse
Check the pin position of the power connector of the car with the table on the below. If positions 4 and 7 are reversed, remove the fuse and shift it to the lower position as shown in the illustration.

Vorsicht

- Dieses Gerät ist ausschließlich für den Betrieb bei 12 V Gleichstrom (negative Erdung) bestimmt.
- Achten Sie darauf, daß die Kabel nicht unter einer Schraube oder zwischen beweglichen Teilen wie z. B. in einer Sitzschiene eingeklemmt werden.
- Schalten Sie, bevor Sie irgendwelche Anschlüsse vornehmen, die Zündung des Fahrzeugs aus, um Kurzschlüsse zu vermeiden.
- Wenn der Stromanschluß des Fahrzeugs nicht mit dem Anschluß am Gerät übereinstimmt, verwenden Sie das Stromversorgungskabel Ⓑ.
- Verbinden Sie das Stromversorgungskabel Ⓑ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluß verbinden.
- **Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.**
- Aus Sicherheitsgründen müssen alle losen, nicht angeschlossenen Drähte mit Isolierband abisoliert werden.

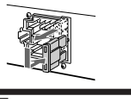
Hinweise zum Stromversorgungskabel (gelb)
- Wenn Sie dieses Gerät zusammen mit anderen Stereokomponenten anschließen, muß der Autostromkreis, an den die Geräte angeschlossen sind, eine höhere Leistung aufweisen als die Summe der Sicherungen der einzelnen Komponenten.
- Wenn kein Autostromkreis eine so hohe Leistung aufweist, schließen Sie das Gerät direkt an die Batterie an.

Stromanschluß

Die Stromanschlüsse verschiedener Fahrzeuge können sich voneinander unterscheiden. Überprüfen Sie anhand des Stromanschluß-Schaltplans des Fahrzeugs, ob die Anschlüsse übereinstimmen. Es gibt zwei Grundtypen. Sie müssen möglicherweise die Position des Überbrückungsanschlusses umschalten. Bevor Sie das Gerät an die Stromversorgung des Fahrzeugs anschließen, stellen Sie sicher, daß die Position des Überbrückungsanschlusses mit der Stiftbelegung des Fahrzeugs übereinstimmt. Wenn der Stromanschluß des Fahrzeugs nicht mit dem Anschluß am Gerät übereinstimmt, verwenden Sie das Stromversorgungskabel Ⓑ. Sollten beim Anschließen des Geräts Fragen oder Probleme auftreten, auf die in dieser Anleitung nicht eingegangen wird, wenden Sie sich bitte an Ihren Autohändler.

ACHTUNG

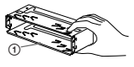
Versetzen der Sicherung
Vergleichen Sie die Stiftposition des Stromanschlusses im Fahrzeug mit der folgenden Tabelle. Sind die Stiftpositionen 4 und 7 umgekehrt, entfernen Sie die Sicherung und bringen sie, wie in der Abbildung gezeigt, statt dessen unten an.



Teileliste (1)

Die Nummern in der Liste sind dieselben wie im Erläuterungstext.

Sicherheitshinweis
Seien Sie beim Umgang mit der Halterung ① vorsichtig, damit Sie sich nicht die Hände verletzen.



Anschlußbeispiel (2)

***Hinweise* (2-A,-B-)**
- *Schließen Sie unbedingt zuerst das Massekabel an, bevor Sie den Verstärker anschließen.*
- *Wenn Sie einen gesondert erhältlichen Endverstärker anschließen und den integrierten Verstärker nicht benutzen, wird der Signalton deaktiviert.*

***Tip* (2-B-)**
Zum Anschließen von zwei oder mehr CD/MD-Wechslern wird der gesondert erhältliche Signalquellenwähler XA-C30 benötigt.

Anschlußdiagramm (3)

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluß ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

B An Schnittstellenkabel eines Autotelefons

Warnung
Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem Stromversorgungskabel Ⓑ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die ATA- (Automatische Tuner-Aktivierung), die AF- (Alternativfrequenzsuche) bzw. die TA-Funktion (Verkehrsdurchsage) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM-(UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluß des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn das gelbe Stromversorgungskabel angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluß
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an der Andernfalls kann das Gerät beschädigt werden.*

Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Évitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer des raccordements, éteignez le moteur pour éviter les courts-circuits.
- Si le connecteur d'alimentation de votre véhicule ne correspond pas au connecteur de l'appareil, utilisez le cordon d'alimention Ⓑ.
- Branchez le cordon d'alimention Ⓑ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassemblez tous les fils de terre en un point de masse commun.**
- Veillez à isoler avec du chatterton tout fil lâche non raccordé.

Remarques sur le cordon d'alimentation (jaune)
- Lorsque cet appareil est raccordé à d'autres éléments stéréo, la valeur nominale des circuits de la voiture raccordée doit être supérieure à la somme des fusibles de chaque élément.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

Raccordement de l'alimentation

Les connecteurs d'alimentation peuvent varier suivant le modèle de la voiture. Vérifiez le schéma du connecteur d'alimentation de votre voiture pour vérifier si les raccordements correspondent. On distingue deux types de base. Il se peut que vous deviez commuter les positions du cavalier. Avant de raccorder l'appareil à l'alimentation de la voiture, faites correspondre la position du cavalier à l'ordre des broches de la voiture. Si le connecteur d'alimentation de votre véhicule ne correspond pas au connecteur de l'appareil, utilisez le cordon d'alimention Ⓑ. Si vous avez des questions ou des problèmes au sujet du raccordement de votre appareil qui ne sont pas abordés dans le présent mode d'emploi, consultez votre concessionnaire automobile.

AVERTISSEMENT

Décalage du fusible
Vérifiez la position des broches du connecteur d'alimentation de la voiture dans le tableau ci-dessous. Si les positions 4 et 7 sont inversées, retirez le fusible et décalez-le sur la position inférieure comme indiqué dans l'illustration.

Attenzione

- Questo apparecchio è stato progettato per il funzionamento solo a 12 V CC, con massa negativa.
- Evitare che i cavi rimangano bloccati da una vite o incastrati nelle parti mobili (ad esempio nelle guide scorrevoli dei sedili).
- Prima di effettuare i collegamenti, spegnere il motore dell'automobile onde evitare di causare cortocircuiti.
- Se il connettore di alimentazione dell'auto non è compatibile con quello dell'apparecchio, utilizzare il cavo di collegamento dell'alimentazione Ⓑ.
- Collegare il cavo di collegamento dell'alimentazione Ⓑ all'apparecchio e ai diffusori prima di collegarlo al connettore di alimentazione ausiliare.
- **Portare tutti i cavi di terra a un punto di terra comune.**
- Per motivi di sicurezza, isolare qualsiasi cavo non collegato mediante apposito nastro.

Note sul cavo di alimentazione (giallo)
- Se questo apparecchio viene collegato con altri componenti stereo, la potenza nominale dei circuiti dell'automobile deve essere superiore a quella prodotta dalla somma dei fusibili di ciascun componente.
- Se la potenza nominale dei circuiti dell'automobile non è sufficiente, collegare l'apparecchio direttamente alla batteria.

Collegamento con l'alimentazione

I connettori di alimentazione possono essere diversi a seconda del tipo di automobile. Controllare il diagramma relativo al connettore di alimentazione della propria auto per assicurarsi che i collegamenti corrispondano perfettamente. Esistono due principali tipi di connettore di alimentazione. Potrebbe essere necessario cambiare le posizioni del connettore ponticello. Prima di collegare l'apparecchio all'alimentazione dell'auto, assicurarsi di far corrispondere la posizione del connettore ponticello all'ordine dei piedini dell'auto. Se il connettore di alimentazione dell'auto non è compatibile con quello dell'apparecchio, utilizzare il cavo di collegamento dell'alimentazione Ⓑ. In caso di domande o problemi relativi al collegamento dell'apparecchio non contemplati in questo manuale, contattare il rivenditore dell'automobile.

AVVERTENZA

Come spostare il fusibile
Controllare la posizione dei piedini del connettore di alimentazione dell'auto utilizzando la tabella riportata più avanti. Se i piedini 4 e 7 sono invertiti, rimuovere il fusibile e spostarlo nella posizione più in basso come mostrato nella figura.

Let op!

- Dit apparaat is ontworpen voor gebruik op gelijkstroom van een 12 Volts auto-accu, negatief geaard.
- Zorg ervoor dat de draden niet onder een schroef of tussen bewegende onderdelen (b.v. zetelrail) terechtkomen.
- Alvorens aansluitingen te verrichten moet u het contact afzetten om kortsluiting te vermijden.
- Gebruik de het netsnoer Ⓑ indien de voedingsstekker van uw auto niet past op de stekker van het toestel.
- Sluit het netsnoer Ⓑ aan op het toestel en de luidsprekers vooraleer u het op de hulpvoedingsaansluiting aansluit.
- **Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.**
- Voorzie niet aangesloten draden om veiligheidsredenen altijd van isolatietape.

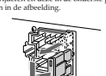
Opmerkingen bij de voedingskabel (geel)
- Wanneer u dit toestel aansluit samen met andere componenten, moet het vermogen van de aangesloten autostroomkring groter zijn dan de som van de de zekeringen van elke component afzonderlijk.
- Wanneer het vermogen ontoereikend is, moet u het toestel rechtstreeks aansluiten op de batterij.

Voedingsaansluiting

Voedingssteekkers kunnen verschillen van auto tot auto. Controleer het voedingsschema van uw auto om na te gaan of de aansluitingen kloppen. Er zijn twee basistypes. Eventueel moeten de posities van de jumpstekker worden omgewisseld. Alvorens het toestel aan te sluiten op de voeding van de auto, moet u controleren of de jumpstekkerpositie overeenkomt met de pinvolgorde. Gebruik de het netsnoer Ⓑ indien de voedingsstekker van uw auto niet past op de stekker van het toestel. Voor alle vragen en problemen in verband met het toestel kunt u terecht bij uw autodealer.

WAARSCHUWING

Verplaatsen van de zekering
Vergelijk de pinpositie van de voedingsstekker in de auto met de onderstaande tabel. Als de posities 4 en 7 omgekeerd zijn, moet u de zekering verwijderen en deze in de onderste positie aanbrengen zoals aangegeven in de afbeelding.



Liste des composants (1)

Les numéros de l'illustration correspondent à ceux des instructions.

Avertissement
Manipulez précautionneusement le support ① pour éviter de vous blesser aux doigts.

Exemple de raccordement (2)

***Remarques* (2-A,-B-)**
- *Raccordez d'abord le fil de masse avant de connecter l'amplificateur.*
- *Si vous raccordez un amplificateur de puissance indépendant et si vous n'utilisez pas l'amplificateur intégré, le bip sera désactivé.*

***Conseil* (2-B-)**
Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Schémas de raccordement (3)

A Au niveau du AMP REMOTE IN d'un amplificateur de puissance en option
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

B Vers le cordon de liaison d'un téléphone de voiture

Avertissement
Si vous disposez d'une antenne électrique sans relais, le raccordement de cet appareil avec le cordon d'alimentation Ⓑ peut endommager l'antenne.

Remarques sur les fils de contrôle
- *La sortie de commande de l'antenne (bleu) fournit du courant continu de +12 V lorsque vous allumez le sélecteur de canaux ou lorsque vous activez la fonction ATA (Activation automatique du syntoniseur), AF (fréquence alternative) ou TA (informations circulation).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière/latérale, raccordez la sortie de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au bornier de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la sauvegarde de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité de manipulation adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*

Attenzione

- Assicurarsi di collegare il cavo di terra prima di collegare l'apparecchio all'amplificatore.
- Se si effettua il collegamento di un amplificatore di potenza opzionale e l'amplificatore incorporato non viene utilizzato, il segnale acustico viene disattivato.

***Suggerimento* (2-B-)**
Per collegare due o più cambia CD/MD, è necessario il selettore di fonte XA-C30 (opzionale).

Schema di collegamento (3)

A A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

B Al cavo interfaccia di un telefono per auto

Avvertenza
Quando si collega l'apparecchio con il cavo di collegamento dell'alimentazione Ⓑ, si potrebbe danneggiare l'antenna elettrica se quella non dispone di scatola a relè.

Note sui cavi di controllo
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore o la funzione ATA (attivazione automatica sintonizzatore), AF (frequenza alternativa) o TA (notiziario sul traffico).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile utilizzare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso dell'alimentazione (giallo) è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando la chiavetta di accensione è spenta.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Utilizzare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venire danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare i diffusori in parallelo.*
- *Non collegare alcun diffusore attivo (con amplificatore incorporato) ai terminali dei diffusori dell'apparecchio perché si potrebbero danneggiare i diffusori attivi. Assicurarsi di collegare diffusori passivi a questi terminali.*

Let op!

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- Zorg ervoor dat de draden niet onder een schroef of tussen bewegende onderdelen (b.v. zetelrail) terechtkomen.
- Alvorens aansluitingen te verrichten moet u het contact afzetten om kortsluiting te vermijden.
- Gebruik de het netsnoer Ⓑ indien de voedingsstekker van uw auto niet past op de stekker van het toestel.
- Sluit het netsnoer Ⓑ aan op het toestel en de luidsprekers vooraleer u het op de hulpvoedingsaansluiting aansluit.
- **Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.**
- Voorzie niet aangesloten draden om veiligheidsredenen altijd van isolatietape.

Opmerkingen bij de voedingskabel (geel)
- Wanneer u dit toestel aansluit samen met andere componenten, moet het vermogen van de aangesloten autostroomkring groter zijn dan de som van de de zekeringen van elke component afzonderlijk.
- Wanneer het vermogen ontoereikend is, moet u het toestel rechtstreeks aansluiten op de batterij.

Voedingsaansluiting

Voedingssteekkers kunnen verschillen van auto tot auto. Controleer het voedingsschema van uw auto om na te gaan of de aansluitingen kloppen. Er zijn twee basistypes. Eventueel moeten de posities van de jumpstekker worden omgewisseld. Alvorens het toestel aan te sluiten op de voeding van de auto, moet u controleren of de jumpstekkerpositie overeenkomt met de pinvolgorde. Gebruik de het netsnoer Ⓑ indien de voedingsstekker van uw auto niet past op de stekker van het toestel. Voor alle vragen en problemen in verband met het toestel kunt u terecht bij uw autodealer.

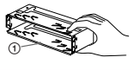
WAARSCHUWING

Verplaatsen van de zekering
Vergelijk de pinpositie van de voedingsstekker in de auto met de onderstaande tabel. Als de posities 4 en 7 omgekeerd zijn, moet u de zekering verwijderen en deze in de onderste positie aanbrengen zoals aangegeven in de afbeelding.

Onderdelenlijst (1)

De nummers in de afbeelding verwijzen naar die in de montage-aanwijzingen.

Opgelet
Houd de beugel ① voorzichtig vast zodat u uw vingers niet verwondt.



Voorbeeldaansluitingen (2)

***Opmerkingen* (2-A,-B-)**
- *Sluit eerst de massakabel aan alvorens de versterker aan te sluiten.*
- *Wanneer u een los verkrijgbare vermogensversterker aansluit en de ingebouwde versterker niet gebruikt, wordt de pieptoon uitgeschakeld.*

***Tip* (2-B-)**
Om twee of meer CD/MD-wisselaars aan te sluiten, hebt u de geluidsbronkiezer XA-C30 (optioneel) nodig.

Aansluitschema (3)

A Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

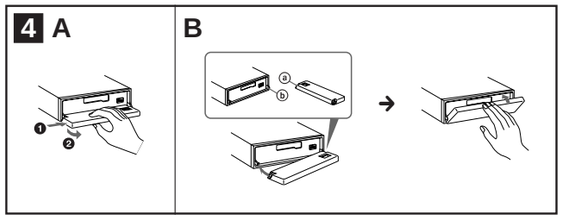
B Naar het interface-snoer van een autotelefoon

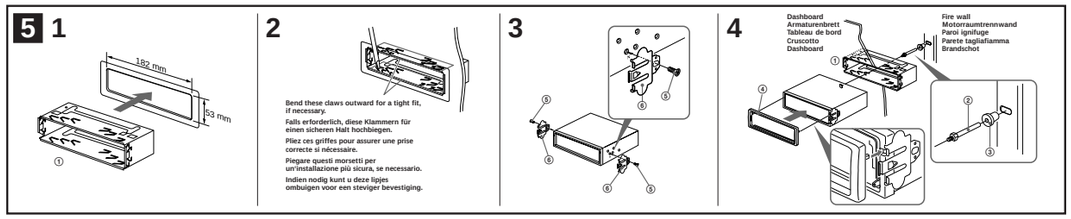
Opgelet
Indien u beschikt over een elektrische antenne zonder relaiskast, kan de antenne worden beschadigd wanneer u dit toestel aansluit met behulp van de het netsnoer Ⓑ.

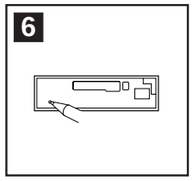
Opmerking betreffende de aansluitsnoeren
- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom als de tuner wordt ingeschakeld of als de functie ATA (Automatische Tuner Activering), AF (Alternatieve Frequenties) of TA (verkeersinformatie) wordt geactiveerd.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/voorruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antennenversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaiskast te gebruiken.*

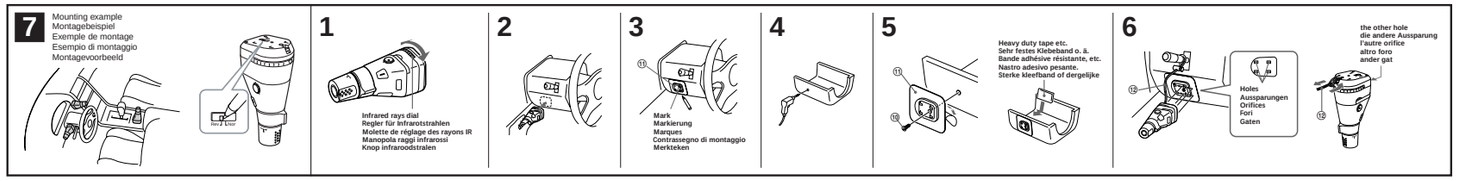
Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomtoevoer naar het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van het toestel. Sluit dus alléén uitsluitend luidsprekers zonder ingebouwde versterker aan.*









Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.
- There must be a distance of at least 15 cm between the cassettes slot of the unit and shift lever to insert cassette easily. Choose the installation location carefully so the unit does not interfere with gear shifting and other driving operations.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

How to detach and attach the front panel (4)

Before installing the unit, detach the front panel.

4-A To detach
Before detaching the front panel, be sure to press the power on/off button on the unit (or OFF on the card remote commander or the rotary commander). Press OPEN, then slide the front panel to the right side, and pull out the left side.

4-B To attach
Place the hole ⓐ in the front panel onto the spindle ⓑ on the unit as illustrated, then push the left side in.

Mounting example (5)

Installation in the dashboard

Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press the power on/off button on the unit (or OFF on the card remote commander or the rotary commander) for two seconds to turn off the clock display after turning off the engine.
When you press the power on/off button on the unit (or OFF on the card remote commander or the rotary commander) only momentarily, the clock display does not turn off and this causes battery wear.

RESET button (6)

When the installation and connections are completed, be sure to press the RESET button with a ballpoint pen, etc.

Installing the rotary commander (RM-X5S) (7)

Notes
- *Choose the mounting location carefully so that the rotary commander will not interfere with operating the car.*
- *Do not install the rotary commander where it may jeopardize the safety of the (front) passenger in anyway.*
- *When installing the rotary commander, be sure not to damage the electrical cables etc. on the other side of the mounting surface.*
- *Avoid installing the rotary commander where it may be subject to high temperatures, such as from direct sunlight or hot air from the heater etc.*
- *The ReVNor-select switch is located on the bottom of the rotary commander. Select "Nor" to use the rotary commander as the factory-set position. Select "Rev" when you mount the rotary commander on the right side of the steering column.*

Tip
ReVNor cannot be selected on the side of master unit.

1 **With the mounting location in mind, press the buttons and rotate the controls to make sure that your master unit reacts well.**
You can change the direction of infrared rays by turning the dial on the rotary commander.

Caution
Be sure that the place where you install the rotary commander is within the range of receptor on the unit.

2 **Choose the exact location for the rotary commander to be mounted, then clean the mounting surface.**
Dirt or oil impair the adhesive strength of the double-sided adhesive tape.

3 **Mark position for the supplied screw.**
Use the screw holes on the mounting hardware ⓘ to mark the positions.
If you cannot make the mounting hardware ⓘ fit easy, cut the mounting hardware ⓘ to fit the steering wheel column cover.

4 **Remove the steering wheel column cover, and drill 2 mm diameter hole where you have marked.**

5 **Warm the mounting surface and the double-sided adhesive tape on the mounting hardware ⓘ to the temperature of 20 °C to 30 °C, and attach the mounting hardware ⓘ onto the mounting surface by applying even pressure. Then screw it down with the supplied screw ⓙ.**
Attach a piece of heavy duty tape etc. on the other side of the mounting surface to cover the protruding tips of the screws so that they will not interfere with the electrical cables etc. inside the steering wheel column.

6 **After installing the steering wheel column cover, attach the rotary commander to the mounting hardware by aligning the four holes on the bottom of the rotary commander to the four catches on the mounting hardware and sliding the rotary commander until it locks into place as illustrated.**

Cautions
- *Be sure to attach the supplied strap ⓚ when installing the rotary commander near the steering wheel.*
- *Be sure that the strap ⓚ does not get caught on the car controls (gear, shifter, etc.).*
- *Be sure to tighten the stopper of the strap ⓚ after hanging the strap ⓚ on the indicator switch, etc.*

Tip
There are two holes for the strap ⓚ. You can use whichever hole you prefer.

Note
If you are mounting the rotary commander to the steering wheel column, make sure that the protruding tips of the screws on the inner surface of the column do not in anyway hinder or interfere with the movement of the rotating shaft, operative parts of the switches or the electrical cables etc. inside the column.

Vorsichtsmaßnahmen

- Wählen Sie den Einbauort sorgfältig so aus, daß das Gerät beim Fahren nicht hinderlich ist.
- Bauen Sie das Gerät so ein, daß es keinen hohen Temperaturen (keinem direkten Sonnenlicht, keiner Warmluft von der Heizung), keinem Staub, keinem Schmutz und keinen starken Vibrationen ausgesetzt ist.
- Für eine sichere Befestigung verwenden Sie stets nur die mitgelieferten Montageteile.
- Zwischen dem Kassettenfach des Geräts und dem Schalthebel des Fahrzeugs muß ein Abstand von mindestens 15 cm sein, damit eine Kassette mühelos eingelegt werden kann. Wählen Sie den Einbauort sorgfältig so aus, daß das Gerät beim Schalten nicht hinderlich ist.

Hinweis zum Montagewinkel
Das Gerät sollte in einem Winkel von weniger als 20° montiert werden.

Abnehmen und Anbringen der Frontplatte (4)

Nehmen Sie die Frontplatte vor dem Einbau des Geräts ab.

4-A Abnehmen
Bevor Sie die Frontplatte abnehmen, drücken Sie unbedingt die Ein-/Ausschalttaste am Gerät oder die Taste OFF an der Kartenfernbedienung oder dem Joystick. Drücken Sie OPEN, schieben Sie dann die Frontplatte nach rechts, und ziehen Sie sie an der linken Seite heraus.

4-B Anbringen
Setzen Sie die Aussparung ⓐ an der Frontplatte wie in der Abbildung dargestellt am Stift ⓑ am Gerät an, und drücken Sie dann die linke Seite hinein.

Anschlußbeispiel (5)

Installation im Armaturenbrett

Warnhinweis zur Installation des Ger äts in einem Auto mit Z ündschloß ohne Zubehörposition ACC oder I

Drücken Sie unbedingt 2 Sekunden lang die Ein-/Ausschalttaste am Gerät oder die Taste OFF an der Kartenfernbedienung oder dem Joystick, um die Uhrzeitanzeige auszuschalten, nachdem Sie den Motor ausgeschaltet haben.
Wenn Sie die Ein-/Ausschalttaste am Gerät oder die Taste OFF an der Kartenfernbedienung oder dem Joystick nur kurz drücken, wird die Uhrzeitanzeige nicht ausgeschaltet, und der Autobatterie wird Strom entzogen.

Taste RESET (6)

Nach der Installation und dem Anschluß muß die Taste RESET mit einem Kugelschreiber o. ä. gedrückt werden.

Installieren des Joysticks (RM-X5S) (7)

Hinweise
- *Wählen Sie den Montageort sorgfältig aus, so daß der Joystick beim Fahren nicht im Wege ist.*
- *Montieren Sie den Joystick nicht an einer Stelle, an der er eine Gefahr für den Beifahrer auf dem Vordersitz darstellen könnte.*
- *Achten Sie bei der Montage des Joysticks darauf, die Elektrokabel an der anderen Seite der Montagefläche nicht zu beschädigen.*
- *Montieren Sie den Joystick nicht an einer Stelle, an der er hohen Temperaturen, zum Beispiel direktem Sonnenlicht oder der Warmluft aus der Wagenheizung, ausgesetzt ist.*
- *Der Wählschalter ReVNor befindet sich an der Unterseite des Joysticks. Wählen Sie „Nor", wenn die werkseitig voreingestellte Drehrichtung der Regler beibehalten werden soll. Wählen Sie „Rev", wenn Sie den Joystick auf der rechten Seite der Lenksäule anbringen.*

Tip
ReVNor kann nicht mit dem Hauptgerät ausgewählt werden.

1 **Drücken Sie die Tasten, drehen Sie die Regler, und vergewissern Sie sich, daß das Hauptgerät entsprechend reagiert. Berücksichtigen Sie dabei den Montageort.**
Sie können die Richtung der Infrarotstrahlen ändern, indem Sie den Regler am Joystick drehen.

Vorsicht
Vergewissern Sie sich, daß der Montageort des Joysticks innerhalb der Reichweite des Empfängers am Gerät ist.

2 **Wählen Sie die Stelle aus, an der Sie den Joystick montieren wollen, und reinigen Sie dann die Montagefläche.**
Staub oder Fettspuren beeinträchtigen die Haftung des doppelseitigen Klebebandes.

3 **Markieren Sie die Stelle zum Anbringen der mitgelieferten Schraube.**
Verwenden Sie dazu die Bohrung im Montageteil ⓜ.
Wenn das Montageteil ⓜ nicht auf die Abdeckung der Lenksäulenöffnung paßt, schneiden Sie es bitte zurecht.

4 **Nehmen Sie die Abdeckung der Lenkradsäule ab, und bohren Sie an der Stelle, die Sie gerade markiert haben, ein Loch von 2 mm Durchmesser.**

5 **Erwärmen Sie die Montagestelle und das doppelseitige Klebeband am Montageteil ⓜ auf eine Temperatur von 20 bis 30 °C, und drücken Sie dann das Montageteil ⓜ mit gleichmäßigem Druck auf die Montagestelle. Befestigen Sie es dann mit der mitgelieferten Schraube ⓙ.**
Bringen Sie ein Stück sehr festes Klebeband o. ä. an der Gegenseite der Montagefläche an, um die vorstehenden Spitzen der Schrauben abzudecken, damit diese nicht die Elektrokabel in der Lenkradsäule beschädigen können.

6 **Bringen Sie nun die Abdeckung der Lenkradsäule wieder an, und befestigen Sie dann den Joystick auf dem Montageteil, indem Sie die vier Aussparungen an der Unterseite des Joysticks an den vier Haken auf dem Montageteil ausrichten und den Joystick daraufschieben, bis er einrastet, wie auf der Abbildung zu sehen.**

Vorsicht
- *Achten Sie darauf, den mitgelieferten Riemen ⓚ anzubringen, wenn Sie den Joystick in der Nähe des Lenkrades installieren.*
- *Achten Sie darauf, daß sich der Riemen ⓚ nicht an Bedienelementen des Fahrzeugs verfängt (Schalthebel, Handbremse usw.).*
- *Achten Sie darauf, den Stopper des Riemens ⓚ anzuziehen, nachdem Sie den Riemen ⓚ an den Blinkerhebel o. ä. gehängt haben.*

Tip
Für den Riemen ⓚ sind zwei Aussparungen vorhanden. Sie können sie nach Belieben auswählen.

Hinweis
Wenn Sie den Joystick an der Lenkradsäule montieren, achten Sie darauf, daß die vorstehenden Spitzen der Schrauben an der Innenfläche der Lenkradsäule die Bewegung der Lenkwelle, die Funktionsteile der Schalter bzw. die Elektrokabel innerhalb der Lenkradsäule in keiner Weise behindern.

Précautions

- Choisissez soigneusement l'emplacement de l'installation afin que l'appareil ne gêne pas la conduite normale du véhicule.
- Evitez d'installer l'appareil dans un endroit exposé à la poussière, à la saleté, à des vibrations excessives ou à des températures élevées comme en plein soleil ou à proximité de conduits de chauffage.
- Pour garantir un montage sûr, n'utilisez que le matériel fourni.
- Pour pouvoir introduire aisément une cassette, il doit y avoir une distance d'au moins 15 cm entre le logement de la cassette de l'appareil et le levier de changement de vitesses. Choisissez soigneusement l'endroit de montage de telle façon que l'appareil ne gêne pas le maniement du changement de vitesses ou toute autre opération de conduite.

Réglage de l'angle de montage
Ajuster l'inclinaison à un angle inférieur à 20°.

Retrait et pose de la fa çade (4)

Avant d'installer l'appareil, retirez la façade.

4-A Pour retirer
Avant d'enlever la façade, veillez à appuyer sur la touche de mise sous tension/hors tension de l'appareil (ou OFF) sur la mini-télécommande ou le satellite de commande). Appuyez sur OPEN, puis faites glisser la façade vers la droite et retirez-la par la gauche.

4-B Pour poser
Fixez la partie ⓐ de la façade sur la partie ⓑ de l'appareil, comme indiqué sur l'illustration, puis appuyez sur le côté gauche jusqu'au déclic.

Exemple de montage (5)

Installation dans le tableau de bord

Avertissement en cas d'installation dans une voiture dont le contact ne comporte pas de position ACC (accessoires)

Après avoir coupé le moteur, veillez à appuyer sur la touche de mise sous tension/hors tension de l'appareil (ou OFF) sur la télécommande ou le satellite de commande) pendant deux secondes pour désactiver l'affichage de l'horloge.
Lorsque vous appuyez sur la touche de mise sous tension/hors tension (ou OFF) sur la mini-télécommande ou le satellite de commande) brièvement, l'affichage de l'horloge ne s'éteint pas et cela provoque l'usure de la pile.

Touche RESET (6)

Quand l'installation et les raccordements sont terminés, appuyez sur la touche RESET avec un stylo à bille, etc.

Installation du satellite de commande (RM-X5S) (7)

Remarques
- *Choisissez soigneusement l'endroit de montage afin que le satellite de commande n'interfère pas avec les commandes de la voiture.*
- *N'installez pas le satellite de commande dans un endroit qui risque de compromettre la sécurité du passager avant de quelque façon que ce soit.*
- *Lors de l'installation du satellite de commande, veillez à ne pas endommager les câbles électriques, etc., situés de l'autre côté de la surface de montage.*
- *Evitez d'installer le satellite de commande là où il risque d'être soumis à des températures élevées comme sous le rayonnement direct du soleil ou à côté d'une conduite de chauffage, etc.*
- *Le commutateur de sélection ReVNor est situé dans la partie inférieure du satellite de commande. Sélectionnez "Nor" pour utiliser le satellite de commande dans la position définie par défaut. Sélectionnez "Rev" si vous montez le satellite de commande du côté droit de la colonne de direction.*

Conseil
Il est impossible de sélectionner RevINor sur le côté de l'appareil principal.

1 **En gardant à l'esprit la position de montage, appuyez sur les boutons et tournez les commandes pour vérifier que l'appareil principal réagit correctement.**
Vous pouvez changer le sens des rayons IR en tournant la molette située sur le satellite de commande.

Précaution
Assurez-vous que l'endroit où vous installez le satellite de commande est à portée du récepteur de l'appareil.

2 **Choisissez la position de montage exacte du satellite de commande et nettoyez la surface de montage.**
Les souillures et l'huile altèrent le pouvoir adhérent de l'adhésif double face.

3 **Marquez la position pour la vis fournie.**
Utilisez l'orifice de vissage du support de montage ⓜ pour marquer les positions.
Si vous ne parvenez pas à ajuster aisément le support de montage ⓜ, découpez-le afin qu'il s'adapte à la colonne de direction.

4 **Déposez la garniture de la colonne de direction et percez un trou de 2 mm de diamètre aux endroits que vous avez marqués.**

5 **Chauffez la surface de montage et l'adhésif double face sur le support de montage ⓜ à une température comprise entre 20 °C et 30 °C et fixez le support de montage sur la surface de montage ⓜ en exerçant une pression uniforme. Visez ensuite la vis ⓙ fournie.**
Collez de la bande adhésive résistante, etc., de l'autre côté de la surface de montage de manière à couvrir l'extrémité saillante des vis de telle sorte qu'elle ne puissent entrer en contact direct avec les câbles électriques, etc., à l'intérieur de la colonne de direction.

6 **Après avoir remonté le couvercle de la colonne de direction, fixez le satellite de commande sur le support de montage en alignant les quatre orifices pratiqués à la base du satellite sur les quatre ergots du support de montage et faites coulisser le satellite de commande jusqu'à ce qu'il s'encliquette dans sa position définitive comme illustré.**

Précautions
- *Lors de l'installation du satellite de commande près du volant, veillez à bien fixer la courroie ⓚ fournie.*
- *Assurez-vous que la courroie ⓚ ne soit pas prise dans les commandes du véhicule (levier de vitesses, etc.).*
- *Assurez-vous de bien serrer la vis de sécurité de la courroie ⓚ après avoir accroché celle-ci au levier de changement de direction, etc.*

Conseil
Il existe deux orifices réservés à la courroie ⓚ. Vous pouvez utiliser indifféremment l'un ou l'autre.

Remarque
Si vous montez le satellite de commande sur la colonne de direction, assurez-vous que l'extrémité saillante des vis à l'intérieur de la colonne de direction n'entrave en aucune façon le mouvement de l'axe, des organes de commande, des commutateurs ou des câbles électriques, etc., à l'intérieur de la colonne de direction.

Precauzioni

- Scegliere con attenzione la posizione per l'installazione in modo che l'apparecchio non interferisca con le operazioni di guida del conducente.
- Evitare di installare l'apparecchio dove sia soggetto ad alte temperature, come alla luce solare diretta o al getto di aria calda dell'impianto di riscaldamento, o dove possa essere soggetto a polvere, sporco e vibrazioni eccessive.
- Usare solo il materiale di montaggio in dotazione per un'installazione stabile e sicura.
- Per poter inserire una cassetta facilmente, è necessario che tra la fessura di inserimento della cassetta e la leva del cambio vi siano almeno 15 cm di distanza. Scegliere la posizione di installazione con attenzione in modo da non ostacolare l'uso del cambio né le altre operazioni di guida.

Regolazione dell'angolo di montaggio
Regolare l'angolo di montaggio in modo che sia inferiore a 20°.

Come rimuovere e reinserire il pannello anteriore (4)

Prima di installare l'apparecchio rimuovere il pannello anteriore.

4-A Per rimuoverlo
Prima di rimuovere il pannello anteriore, assicurarsi di premere il tasto di accensione/spegnimento sull'apparecchio (oppure OFF sul telecomando a scheda o sul telecomando a rotazione). Premere OPEN, quindi far scivolare il pannello anteriore verso destra e tirare il lato sinistro verso di sé.

4-B Per reinserirlo
Applicare il foro ⓐ del pannello anteriore al mandrino ⓑ dell'apparecchio come mostrato nell'illustrazione e premere il lato sinistro fino a sentire uno scatto.

Esempi di collegamento (5)

Installazione nel cruscotto

Informazioni importanti per quando si effettua l 'installazione su un'auto sprovvista della posizione ACC sull'interruttore di accensione

Assicurarsi di premere il tasto di accensione/spegnimento sull'apparecchio (oppure OFF sul telecomando a scheda o sul telecomando a rotazione) per due secondi per spegnere il display dell'orologio dopo che il motore è stato spento.
Se si preme il tasto di accensione/spegnimento sull'apparecchio (oppure OFF sul telecomando a scheda o sul telecomando a rotazione) solo per un attimo, il display dell'orologio non si spegne causando in questo modo lo scaricamento della batteria.

Tasto RESET (6)

Dopo avere terminato l'installazione e i collegamenti, assicurarsi di premere il tasto RESET con la punta di una penna a sfera o di un altro oggetto appuntito.

Installazione del telecomando a rotazione (RM-X5S) (7)

Note
- *Scegliere attentamente la posizione di montaggio in modo che il telecomando a rotazione non interferisca con la guida.*
- *Non installare il telecomando a rotazione in posizione tale da poter compromettere in alcun modo la sicurezza del passeggero.*
- *Al momento di installare il telecomando a rotazione assicurarsi di non danneggiare i cavi elettrici ecc. nella parte posteriore della superficie di montaggio.*
- *Non installare il telecomando a rotazione in posizione soggetta ad alte temperature, ad esempio alla luce solare diretta o al calore proveniente dall'impianto di riscaldamento della vettura.*
- *L'interruttore di selezione ReVNor è situato nella parte inferiore del telecomando a rotazione. Selezionare "Nor" per utilizzare il telecomando a rotazione con le impostazioni di fabbrica. Selezionare "Rev" quando il telecomando a rotazione viene montato sul lato destro del piantone di guida.*

Suggerimento
Non è possibile selezionare RevINor dall'unità principale.

1 **Avendo presente la posizione di montaggio, premere i tasti e ruotare i comandi per verificare che l'apparecchio principale funzioni correttamente.**
È possibile cambiare la direzione dei raggi infrarossi ruotando la manopola sul telecomando a rotazione.

Attenzion
Assicurarsi che il luogo in cui viene installato il telecomando a rotazione sia all'interno della gamma del ricettore dell'unità principale.

2 **Scegliere la posizione esatta di montaggio del telecomando a rotazione, quindi pulire la superficie di montaggio.**
La sporcizia o l'unto possono pregiudicare la tenuta del nastro biadesivo.

3 **Segnare la posizione di montaggio per la vite in dotazione.**
Usare il foro per la vite sulla staffa di montaggio ⓜ per segnare la posizione.
Se non è possibile installare la staffa di montaggio ⓜ facilmente; tagliare la staffa di montaggio ⓜ per adattarla alla copertura del piantone di guida.

4 **Rimuovere il copercchio della colonna del volante e praticare un foro di 2 mm di diametro nella posizione contrassegnata.**

5 **Riscaldare la superficie di montaggio e il nastro biadesivo sulla staffa di montaggio ⓜ ad una temperatura compresa tra 20 °C e 30 °C. Applicare la staffa di montaggio ⓜ sulla superficie di montaggio esercitando una pressione omogenea, quindi fissarla avvitando la vite ⓙ in dotazione.**
Applicare una striscia di nastro adesivo pesante sull'altro lato della superficie di montaggio in modo da coprire la punta sporgente delle viti perché queste non interferiscano con i cavi elettrici all'interno della colonna del volante.

6 **Dopo aver rimontato il copercchio della colonna del volante, montare il telecomando allineando i quattro fori sul fondo del comando ai quattro fermi sulla staffa di montaggio e facendo scorrere il telecomando fino a che non si blocca in posizione, come illustrato in figura.**

Attenzione
- *Assicurarsi di inserire il cordino ⓚ in dotazione quando si installa il telecomando a rotazione vicino al volante.*
- *Assicurarsi che il cordino ⓚ non rimanga incastrato tra i comandi dell'automobile (cambio, pedali, ecc.).*
- *Assicurarsi di stringere il fermo del cordino ⓚ dopo aver applicato il cordino ⓚ all'interruttore dell'indicatore e così via.*

Suggerimento
Esistono due fori per il cordino ⓚ.Utilizzare indifferentemente uno dei due.

Nota
Se il telecomando viene montato sulla colonna del volante, assicurarsi che le punte sporgenti delle viti sulla superficie interna della colonna non pregiudichino o interferiscano in alcun modo con il movimento dell'albero, con i componenti degli interruttori o con i cavi elettrici etc. all'interno della colonna.

Voorzorgsmaatregelen

- Kies de installatieplaats zorgvuldig zodat het toestel de bestuurder niet hindert tijdens het rijden.
- Installeer het apparaat niet op plaatsen waar het blootgesteld wordt aan hoge temperaturen, b.v. in direct zonlicht of bij de warme luchtstroom van de autoverwarming, aan sterke trillingen, of waar het in contact komt met veel stof of vuil.
- Gebruik voor het veilig en stevig monteren van het apparaat uitsluitend de bijgeleverde montage-onderdelen.
- De cassettegleuf van het toestel moet minstens 15 cm van de schakelpook af zitten om een cassette makkelijk te kunnen inbrengen. Kies de installatieplaats zorgvuldig zodat het toestel niet hindert bij het schakelen en andere rijhandelingen.

Maximale montagehoek
Installeer het apparaat nooit onder een hoek van meer dan 20° met het horizontale vlak.

Verwijderen en bevestigen van het afneembare voorpaneel (4)

Verwijder, alvorens met het installeren te beginnen, het afneembare voorpaneel.

4-A Verwijderen
Druk eerst op de aan/uit-toets op het toestel (of OFF op de kaartafstandsbediening of de bedieningssatelliet) alvorens het voorpaneel los te maken. Druk op OPEN, schuif het voorpaneel naar rechts en trek het los aan de linkerkant.

4-B Bevestigen
Breng deel ⓐ van het voorpaneel aan op deel ⓑ van het apparaat zoals afgebeeld en druk op de linkerzijde tot deze vastklikt.

Voorbeeldaansluitingen (5)

Montage in het dashboard

Opgelet bij het monteren in een auto waarvan het contactslot geen ACC (accessory) stand heeft

Druk op de aan/uit-toets op het toestel (of OFF op de kaartafstandsbediening of de bedieningssatelliet) gedurende twee seconden in om de klokweergave uit te schakelen na het afzetten van de motor.
Indien u slechts even op de aan/uit-toets op het toestel (of OFF op de kaartafstandsbediening of de bedieningssatelliet) drukt, verdwijnt de klokweergave niet, waardoor de batterij uitgeput raakt.

RESET-toets (6)

Druk, nadat u het apparaat heeft geïnstalleerd en de aansluitingen heeft gemaakt, met een balpen of een ander puntig voorwerp op de RESET-toets.

Installatie van de bedieningssatelliet (RM-X5S) (7)

Opmerkingen
- *Ga zorgvuldig te werk bij het kiezen van een geschikte montagepositie zodat de bedieningssatelliet u nooit hindert bij het rijden.*
- *Installeer de bedieningssatelliet nooit op een plaats waar hij de veiligheid van de (voor)passagier in gevaar kan brengen.*
- *Bij het installeren van de bedieningssatelliet moet u erop letten dat u de elektrische bedrading en dergelijke aan de andere kant van het montagevlak niet beschadigt.*
- *Installeer de bedieningssatelliet niet op plaatsen waar hij blootstaat aan hoge temperaturen, bijvoorbeeld door rechtstreekse zonnestraling of warme lucht afkomstig van de verwarming, enz.*
- *De ReVNor-keuzeschakelaar bevindt zich onderaan op de bedieningssatelliet. Kies "Nor" om de bedieningssatelliet te gebruiken met de fabrieksinstelling.*
  Kies "Rev" wanneer u de bedieningssatelliet rechts op de stuurkolom monteert.

Tip
RevINor kan niet worden geselecteerd op het hoofdtoestel.

1 **Hou rekening met de montagepositie en druk op de toetsen en draai aan de regelaars om na te gaan of het hoofdtoestel goed reageert.**
U kunt de richting van de infraroodstralen wijzigen door aan de knop op de bedieningssatelliet te draaien.

Let op!
Zorg ervoor dat u de bedieningssatelliet installeert binnen het ontvangstbereik van het toestel.

2 **Kies de exacte installatieplaats voor de bedieningssatelliet en maak vervolgens het montagevlak schoon.**
Vuil of vet tasten het kleefvermogen van het dubbelzijdige plakband aan.

3 **Markeer een bevestigingspunt voor de meegeleverde schroef.**
Markeer de posities aan de hand van de schroefgaten in het bevestigingselement ⓜ.
Als het bevestigingselement ⓜ niet goed past, moet u het overtollige gedeelte afsnijden zodat het wel in de stuurkolombekleding past.

4 **Verwijder de stuurkolombekleding en boor een gat van 2 mm op de gemarkeerde posities.**

5 **Warm het bevestigingsvlak en de dubbelzijdige kleefband op het bevestigingselement ⓜ op tot een temperatuur van 20 à 30 °C en plaats het bevestigingselement ⓜ op het bevestigingsvlak door gelijkmatig aan te drukken. Schroef hem vervolgens vast met de meegeleverde schroef ⓙ.**
Breng een stuk tape of iets dergelijks aan op de andere kant van het bevestigingsvlak om te voorkomen dat de uitstekende schroefpunten in contact komen met de elektrische bedrading en dergelijke binnenin de stuurkolom.

6 **Plaats de stuurkolombekleding terug en bevestig de bedieningssatelliet op het montage-accessoire door de vier gaten onderaan de bedieningssatelliet te laten samenvallen met de vier bevestigingsklemmen op het montage-accessoire en verschuif de bedieningssatelliet tot hij op zijn plaats klikt zoals de illustratie laat zien.**

Let op!
- *Bevestig de meegeleverde riem ⓚ wanneer u de bedieningssatelliet in de buurt van het stuurwiel monteert.*
- *Zorg ervoor dat riem ⓚ niet kan verstrikt raken in de bedieningselementen van de auto (schakelpook enz).*
- *Zet de stopper op de riem ⓚ vast nadat u deze hebt bevestigd aan de richtingaanwijzerhendel enz*

Tip
Er zijn twee gaten voor riem ⓚ. U kunt kiezen welk ervan u gebruikt.

Opmerking
Bij het monteren van de bedieningssatelliet op de stuurkolom, moet u ervoor zorgen dat de uitstekende punten van de schroeven aan de binnenkant van de stuurkolom de stuurstang, schakelaars, elektrische bedrading, enzovoort in de stuurkolom niet hinderen.

6

SECTION 2
DISASSEMBLY

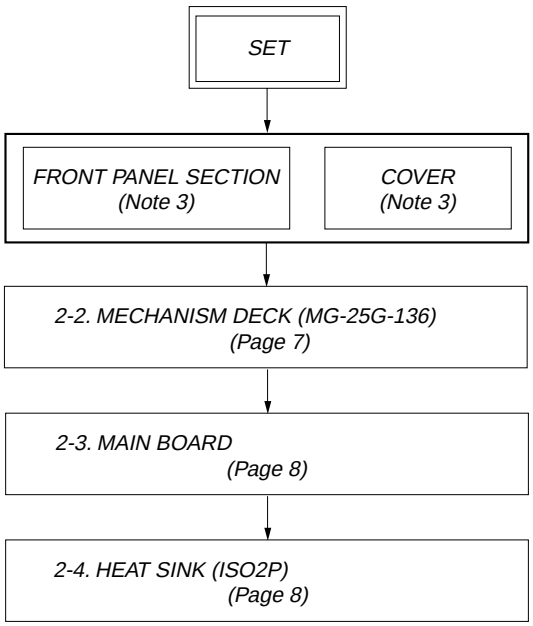
• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

Note 1: *The process described in* ▣ *can be performed in any order.*

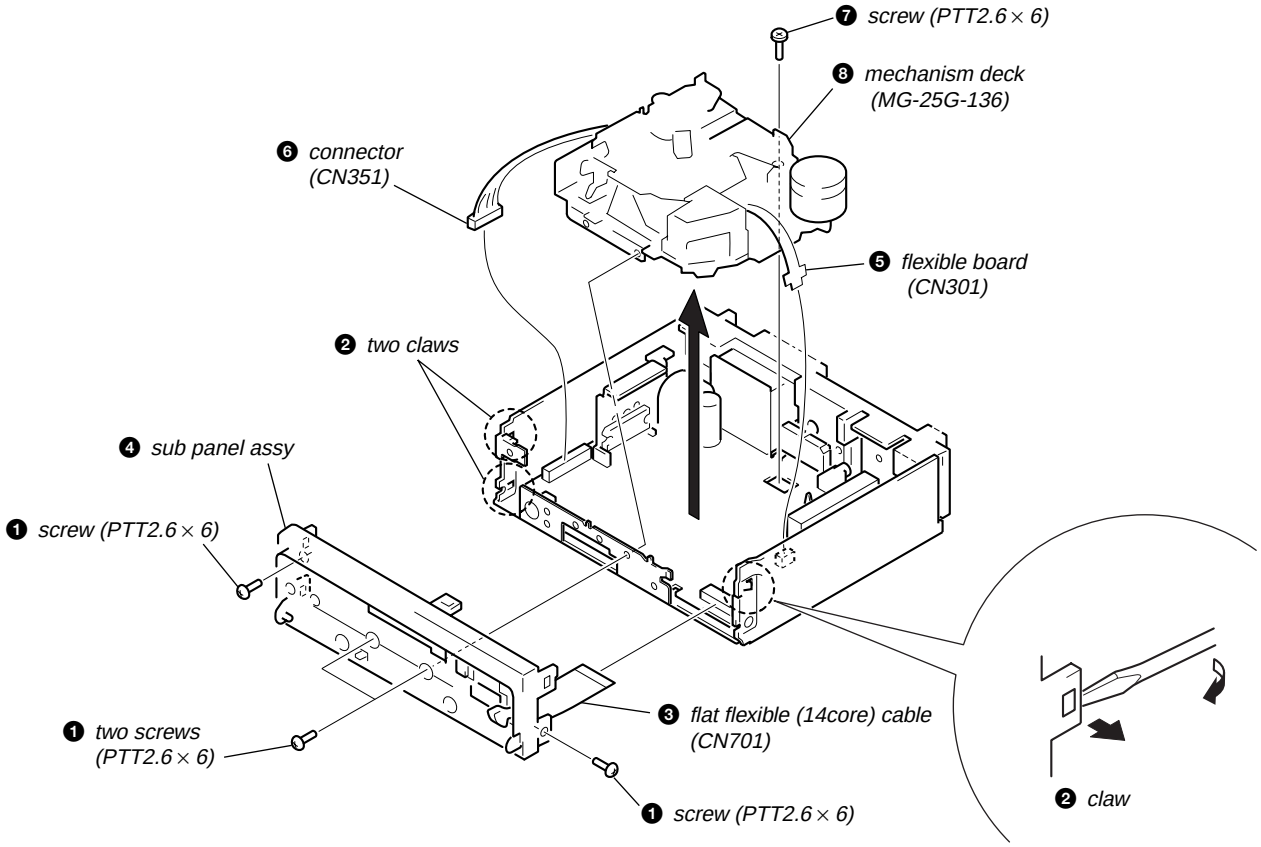
Note 2: *Without completing the process described in* ▣ *, the next process can not be performed.*

Note 3: *Illustration of disassembly is omitted.*

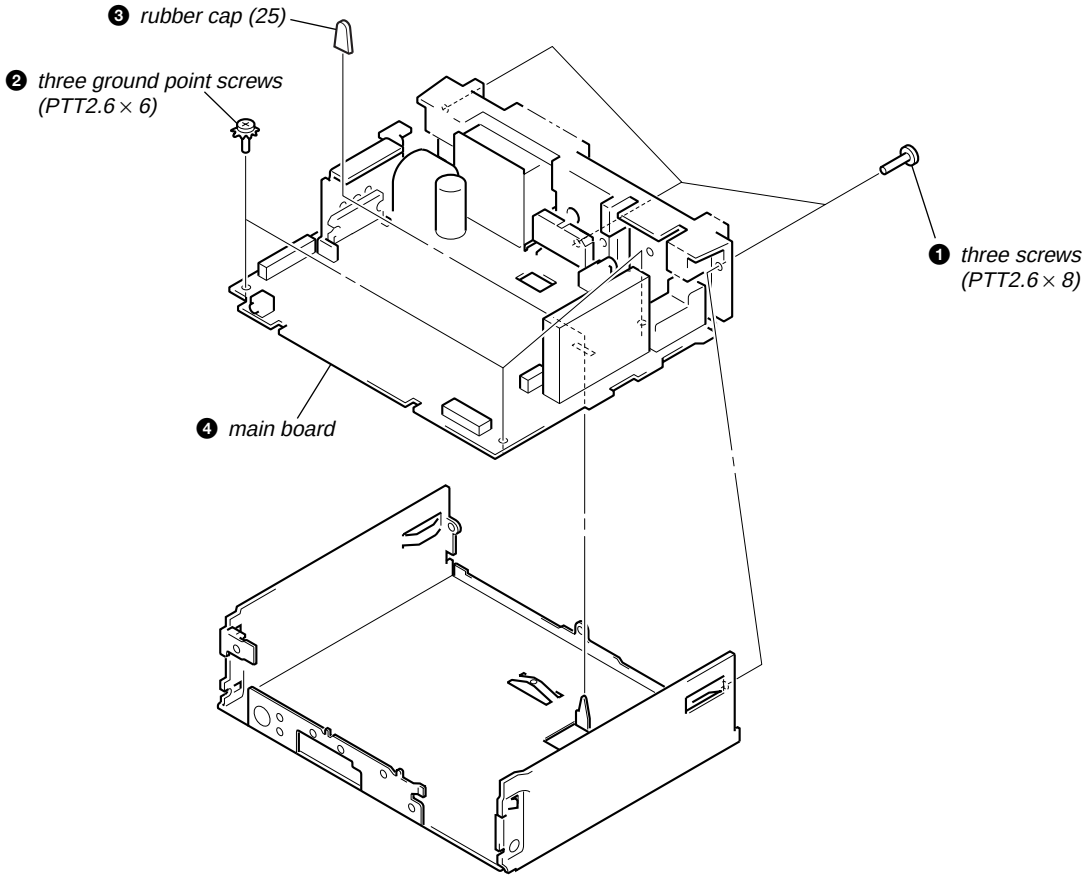


Note: Follow the disassembly procedure in the numerical order given.

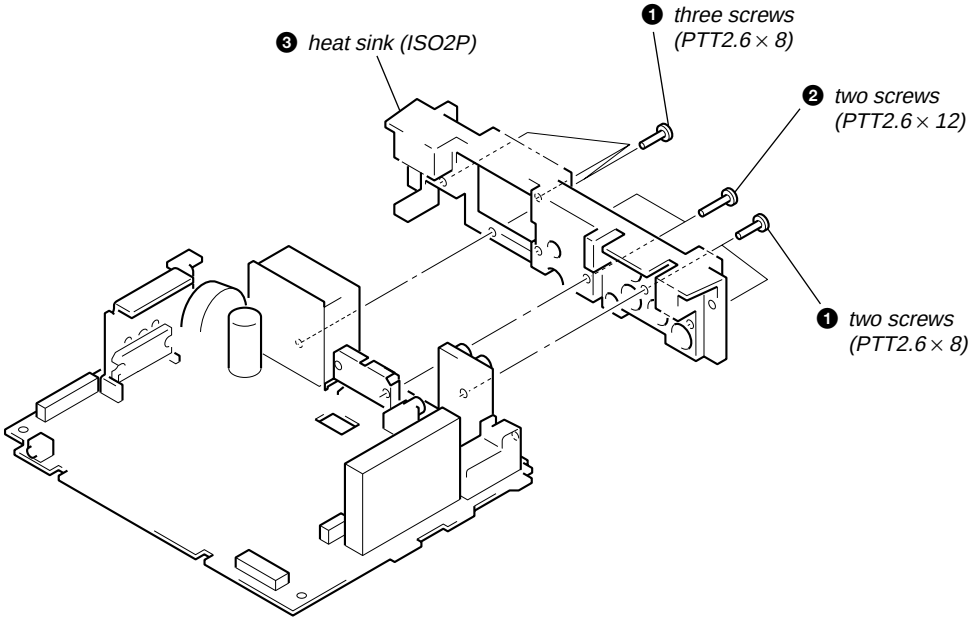
2-2. MECHANISM DECK (MG-25G-136)



2-3. MAIN BOARD



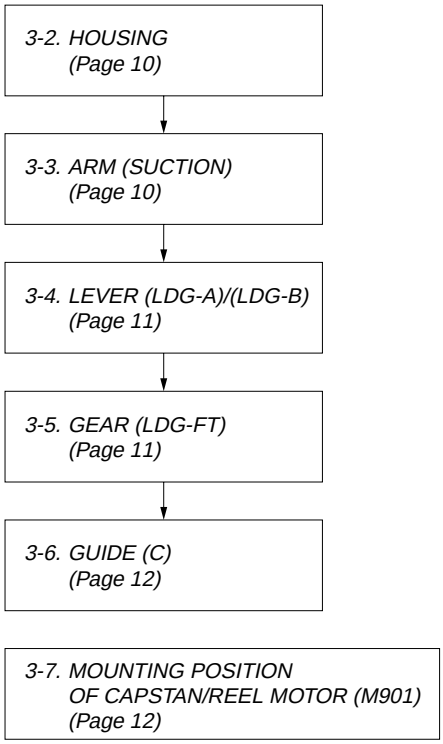
2-4. HEAT SINK (ISO2P)



SECTION 3
ASSEMBLY OF MECHANISM DECK

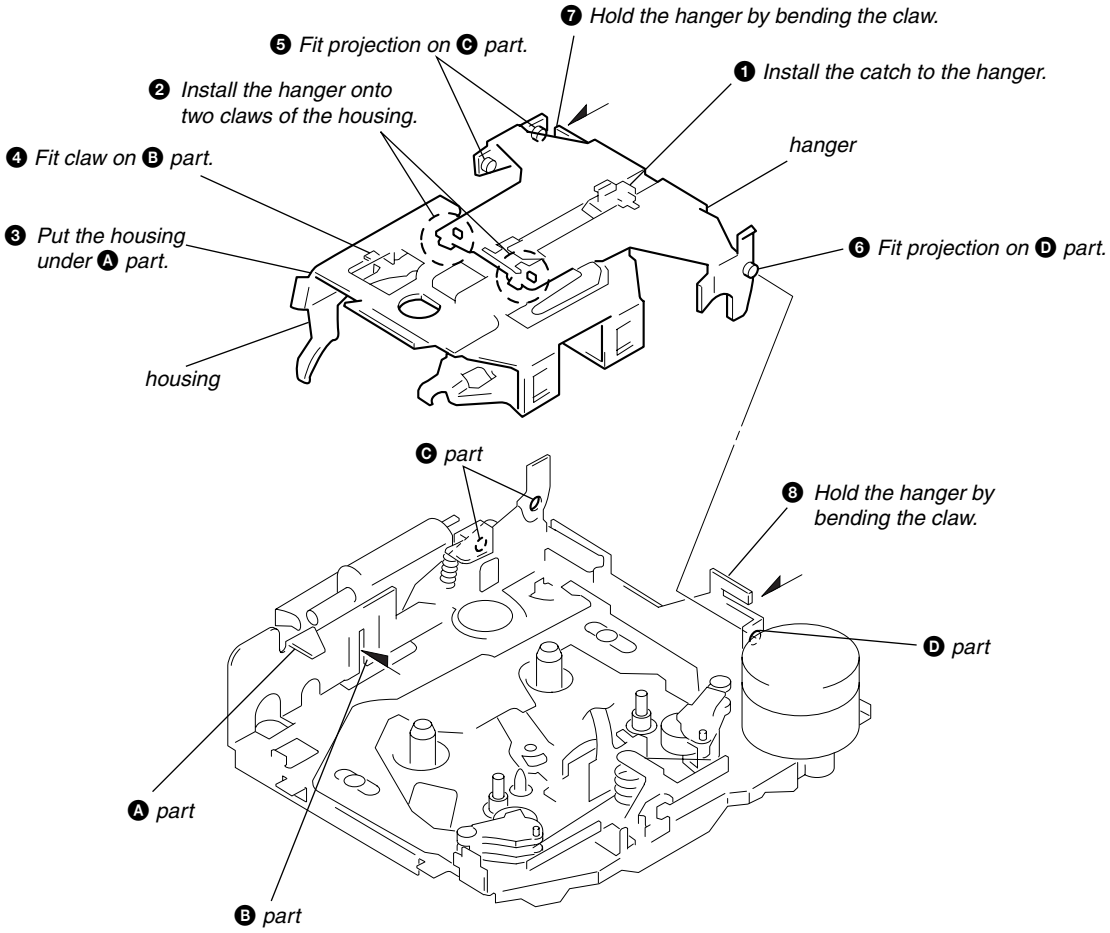
• This set can be assembled in the order shown below.

3-1. ASSEMBLY FLOW

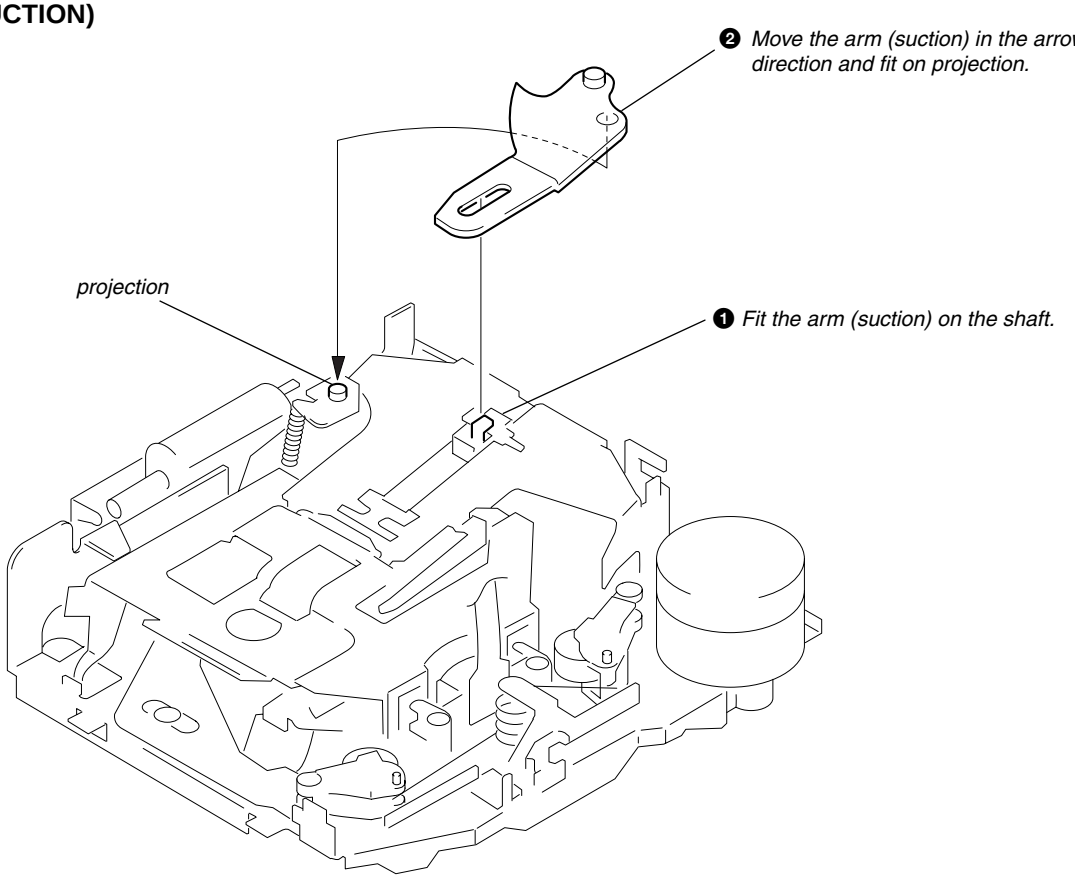


Note: Follow the assembly procedure in the numerical order given.

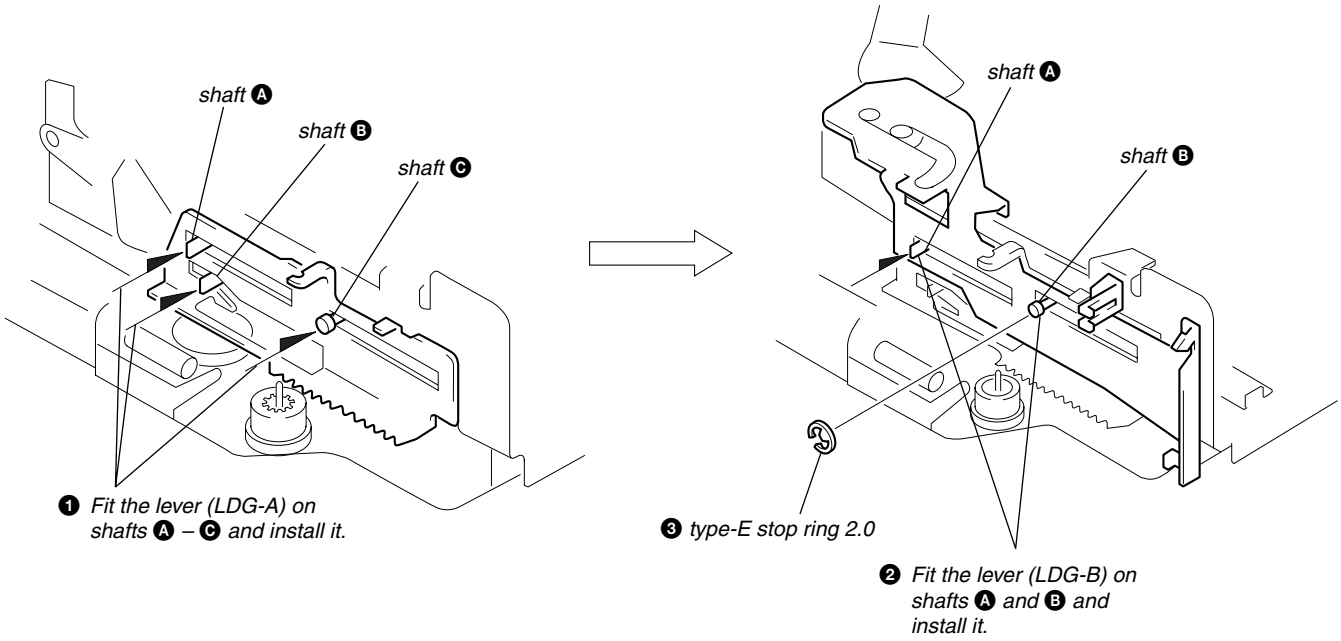
3-2. HOUSING


❼ Hold the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catch to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

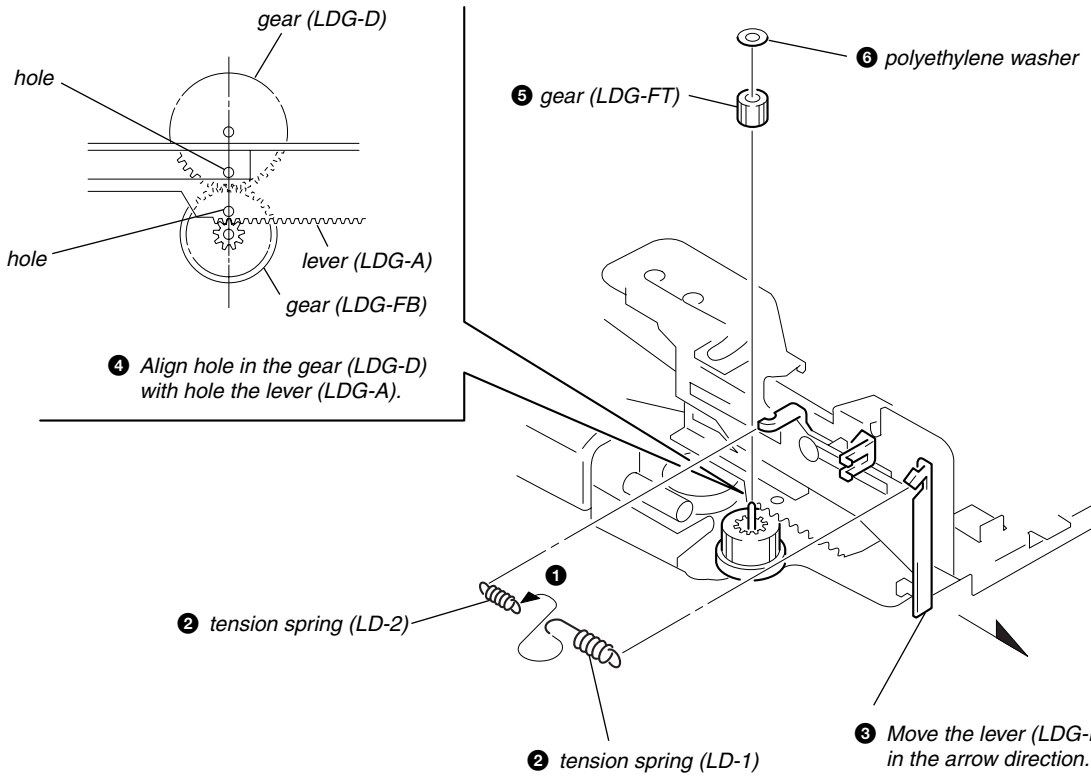
3-3. ARM (SUCTION)



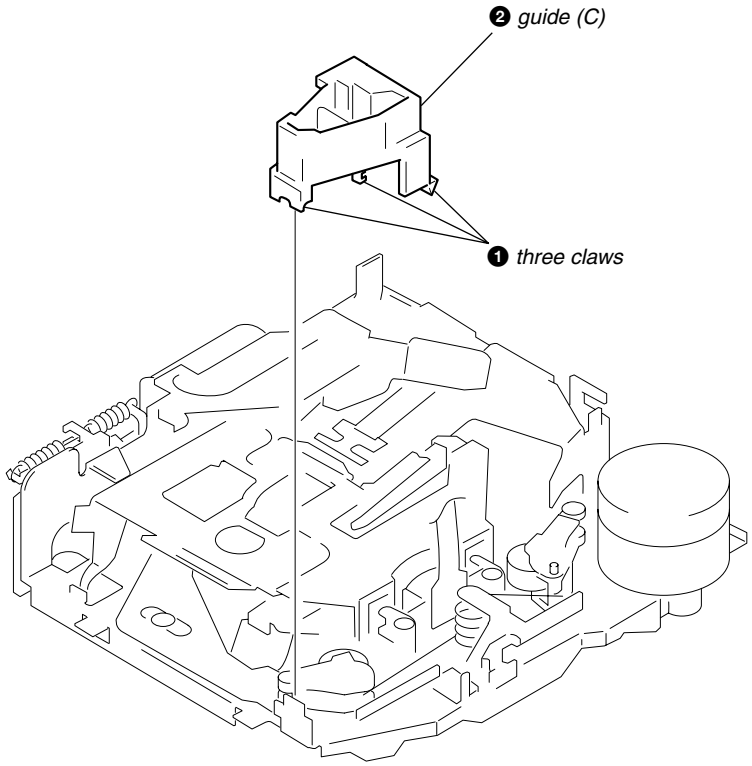
3-4. LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

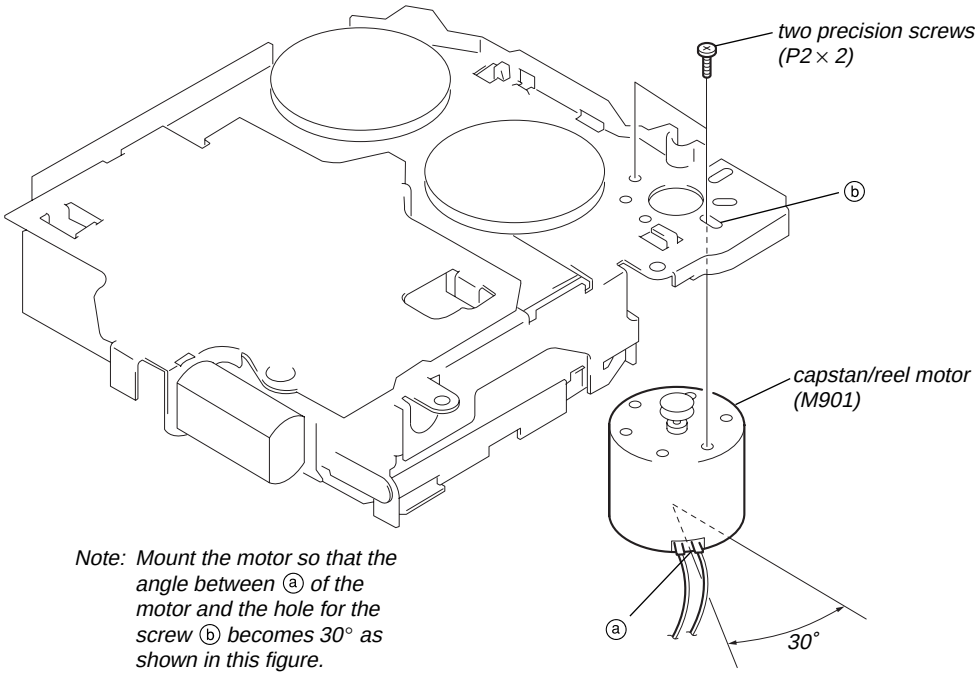
3-5. GEAR (LDG-FT)



3-6. GUIDE (C)



3-7. MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



Note: Mount the motor so that the angle between ⓐ of the motor and the hole for the screw ⓑ becomes 30° as shown in this figure.

SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idler
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. The adjustments should be performed with the power supply voltage (14.4 V) unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	2.95 – 6.37 mN•m (30 – 65 g•cm) (0.42 – 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.05 – 0.44 mN•m (0.5 – 4.5g•cm) (0.01 – 0.06 oz•inch)
Reverse	CQ-102RC	2.95 – 6.37 mN•m (30 – 65 g•cm) (0.42 – 0.90 oz•inch)
Reverse Back Tension	CQ-102RC	0.05 – 0.44 mN•m (0.5 – 4.5g•cm) (0.01 – 0.06 oz•inch)
FF, REW	CQ-201B	5.89 – 19.61 mN•m (60 – 200 g•cm) (0.83 – 2.78 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 60 g (more than 2.12 oz)
Reverse	CQ-403R	more than 60 g (more than 2.12 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. Perform the setting for test mode with the attached card remote commander (RM-X116).

<Set the Test Mode>

• Setting procedure with the card remote commander (RM-X116).

1. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
2. Push the [4] button.
3. Push the [5] button.
4. Press the [1] button for more than two seconds.
5. Then the display indicates all lights, the test mode is set.

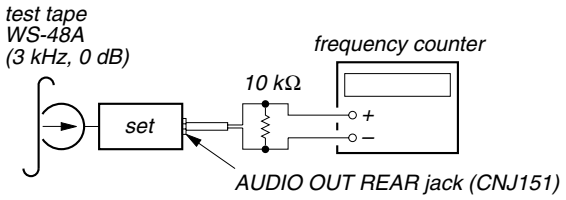
<Release the Test mode>

1. Push the [OFF] button.

TAPE DECK SECTION | 0 dB=0.775 V

Tape Speed Adjustment

Setting:



Procedure:

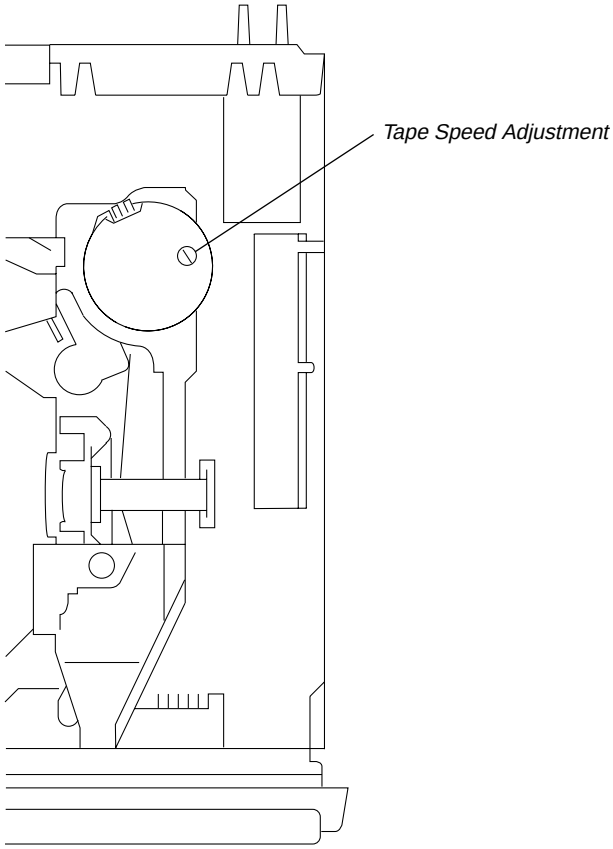
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the frequency counter becomes 3,000 Hz.

Specification: Constant speed

Frequency counter
2,955 to 3,075 Hz

Adjustment Location:

– SET UPPER VIEW –



TUNER SECTION

Tuner section adjustments are done automatically in this set.

SECTION 6
DIAGRAMS

6-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

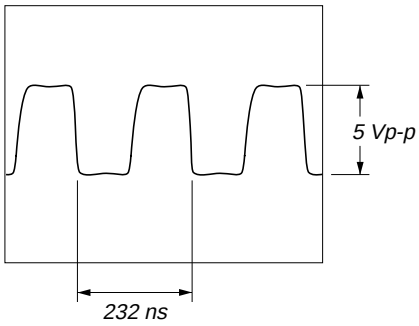
Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW/LW
  〈〈 〉〉 : TAPE PLAYBACK
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW/LW
  ⇨ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN

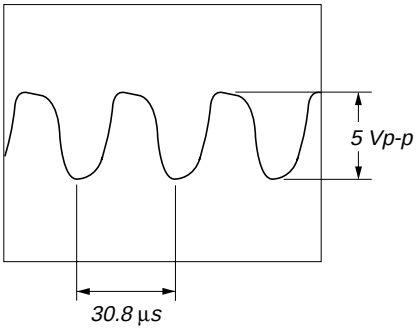
- **Waveforms**

– MAIN Board –

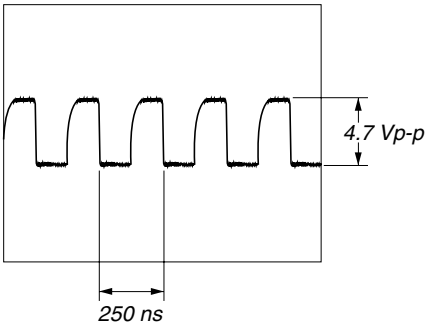
❶ IC51 ④ (OSCO)



❸ IC501 ⑯ (XOUT)

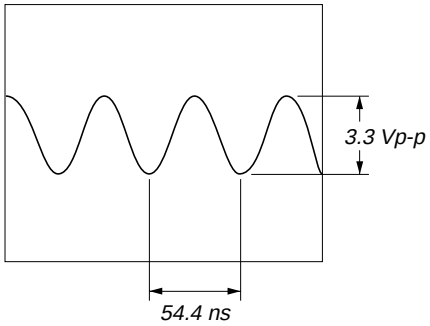


❺ IC903 ④ (XOUT)

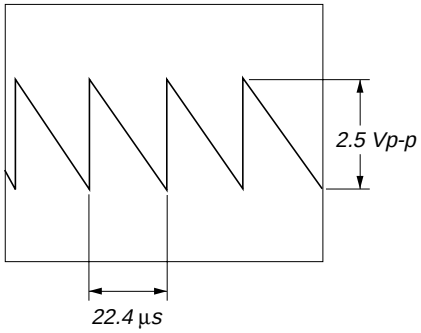


– KEY Board –

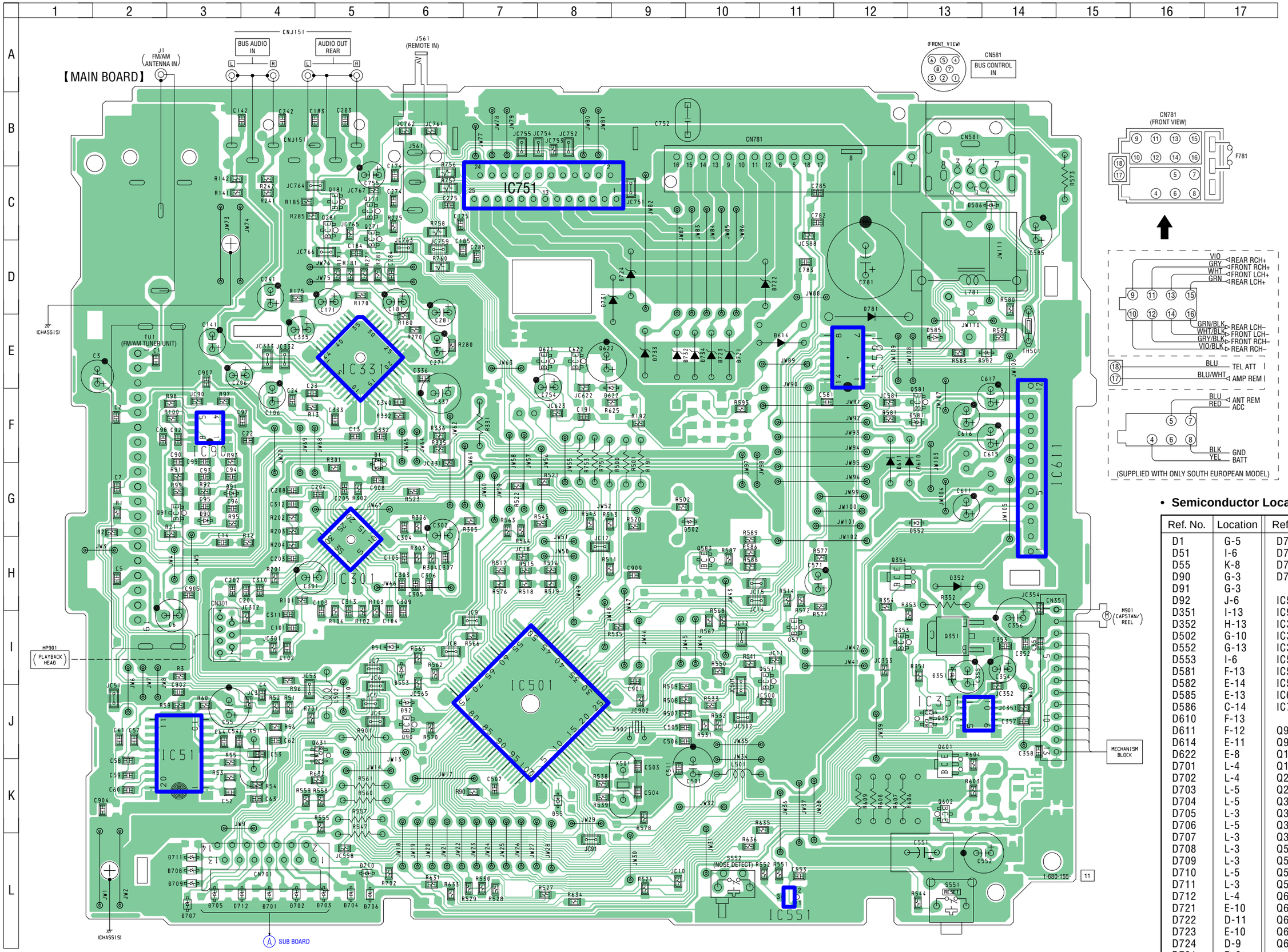
❷ IC501 ⑫ (OSCOUT)



❹ IC900 ⑭ (OSC)



6-2. PRINTED WIRING BOARD – MAIN Board –

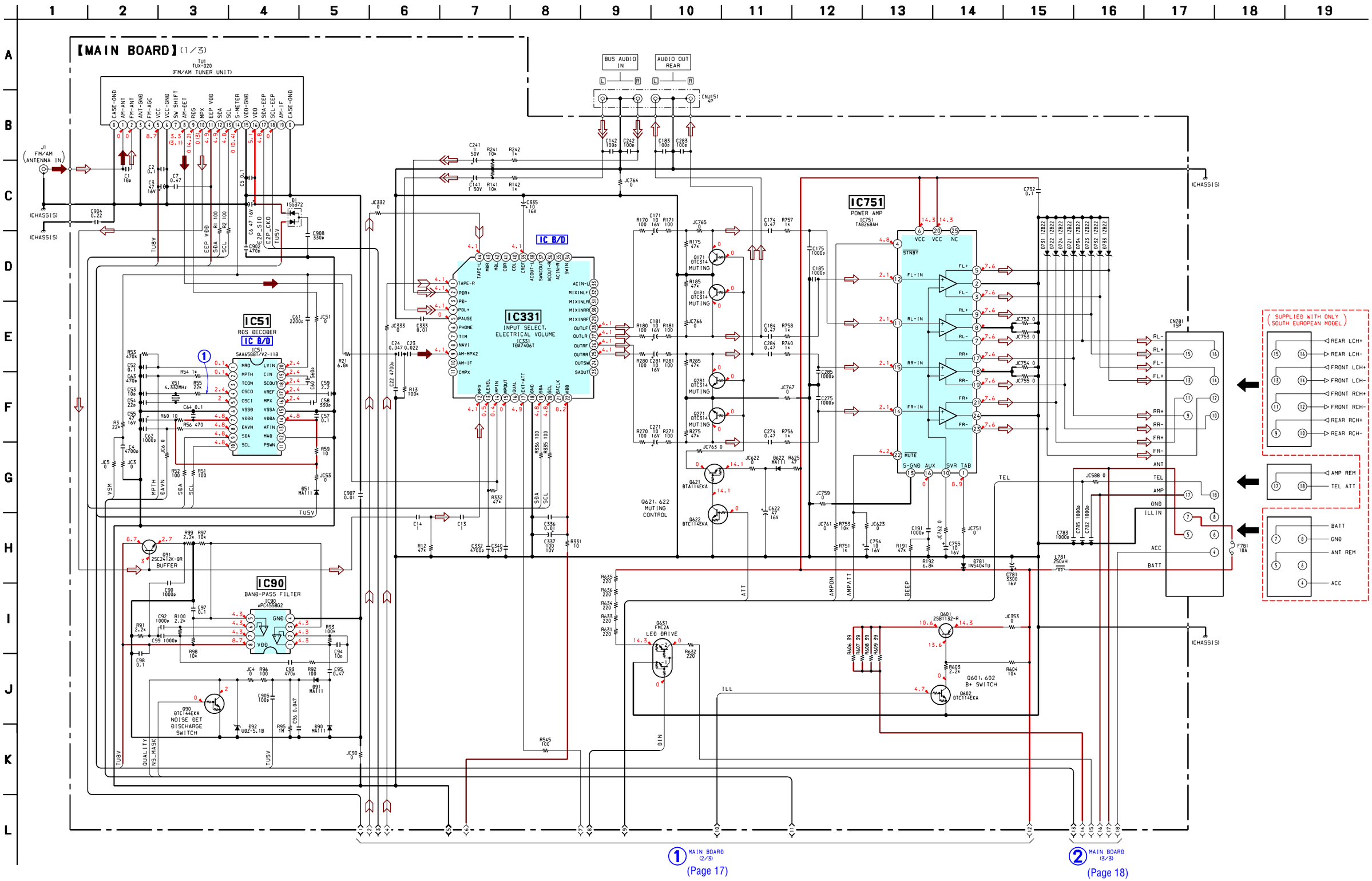


- **Semiconductor Location**

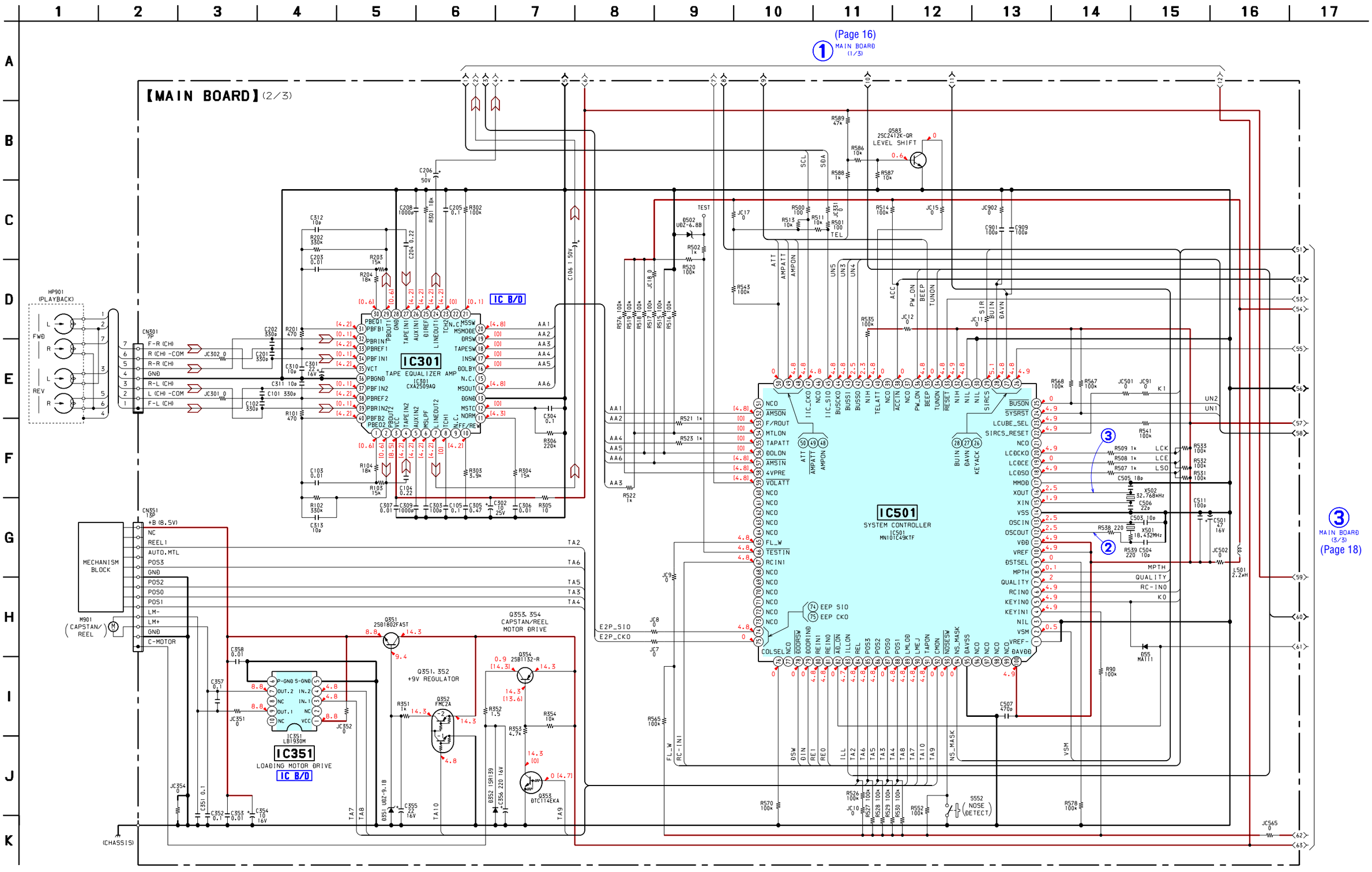
Ref. No.	Location	Ref. No.	Location
D1	G-5	D732	E-9
D51	I-6	D733	E-9
D55	K-8	D734	E-10
D90	G-3	D781	E-12
D91	G-3		
D92	J-6	IC51	J-3
D351	I-13	IC90	F-3
D352	H-13	IC301	H-5
D502	G-10	IC331	E-5
D552	G-13	IC351	J-13
D553	I-6	IC501	J-7
D581	F-13	IC551	L-11
D582	E-14	IC581	E-12
D585	E-13	IC611	G-14
D586	C-14	IC751	C-8
D610	F-13		
D611	F-12	Q90	J-6
D614	E-11	Q91	G-3
D622	E-8	Q171	C-5
D701	L-4	Q181	C-5
D702	L-4	Q271	C-5
D703	L-5	Q281	C-5
D704	L-5	Q351	I-13
D705	L-3	Q352	J-13
D706	L-5	Q353	I-12
D707	L-3	Q354	H-12
D708	L-3	Q551	I-11
D709	L-3	Q571	I-11
D710	L-5	Q581	F-13
D711	L-3	Q583	H-10
D712	L-4	Q601	K-13
D721	E-10	Q602	K-13
D722	D-11	Q621	E-8
D723	E-10	Q622	E-8
D724	D-9	Q631	J-5
D731	D-9		

6-3. SCHEMATIC DIAGRAM – MAIN Board (1/3) –

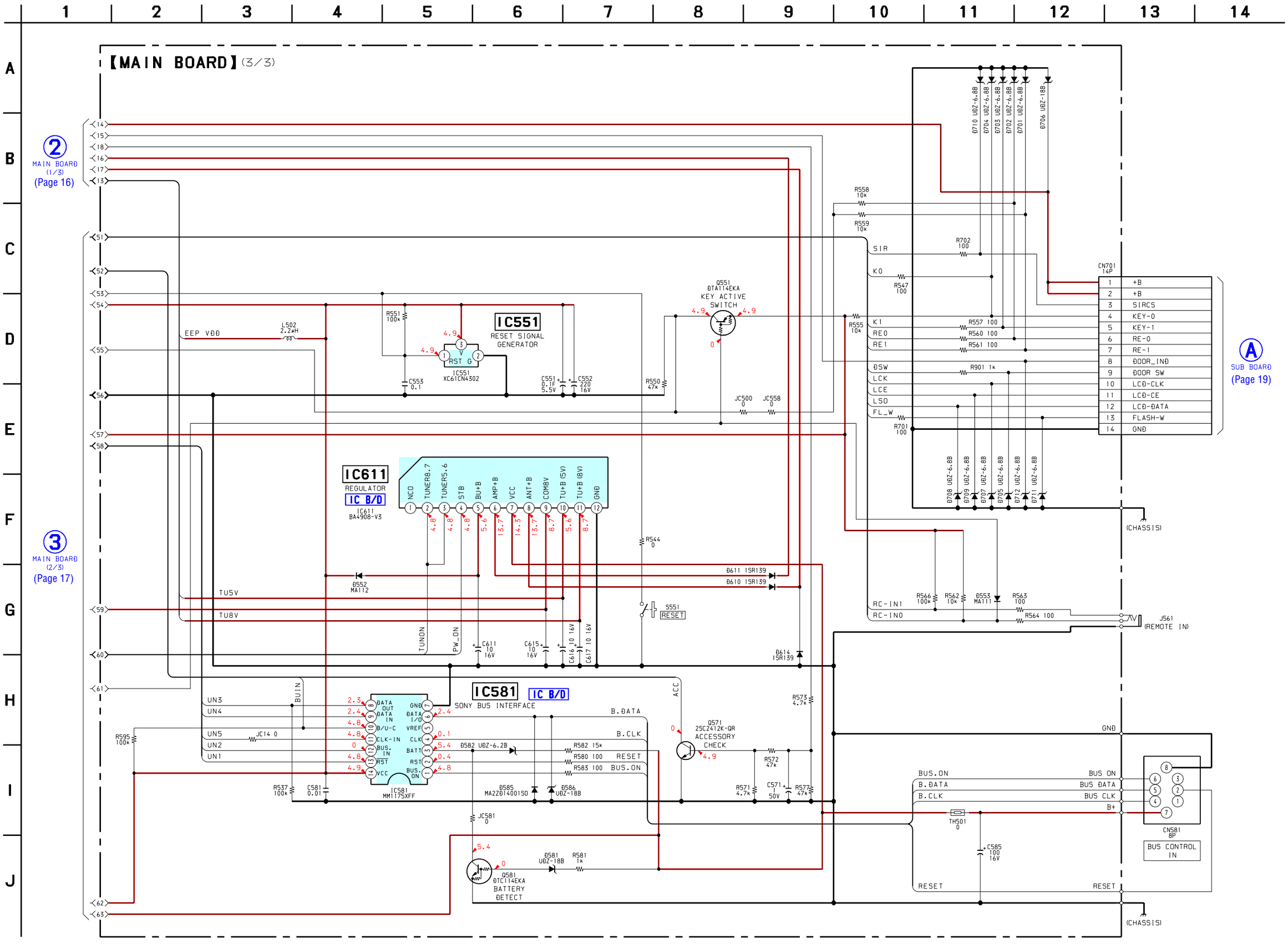
• See page 14 for Waveform. • See page 22 for IC Block Diagrams.



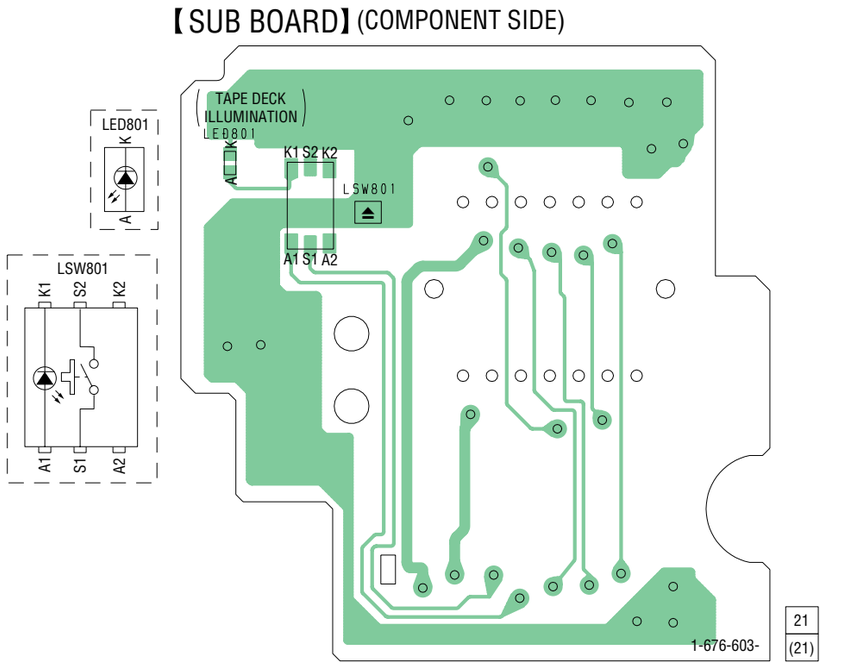
6-4. SCHEMATIC DIAGRAM – MAIN Board (2/3) – • See page 14 for Waveforms. • See page 22 for IC Block Diagrams.



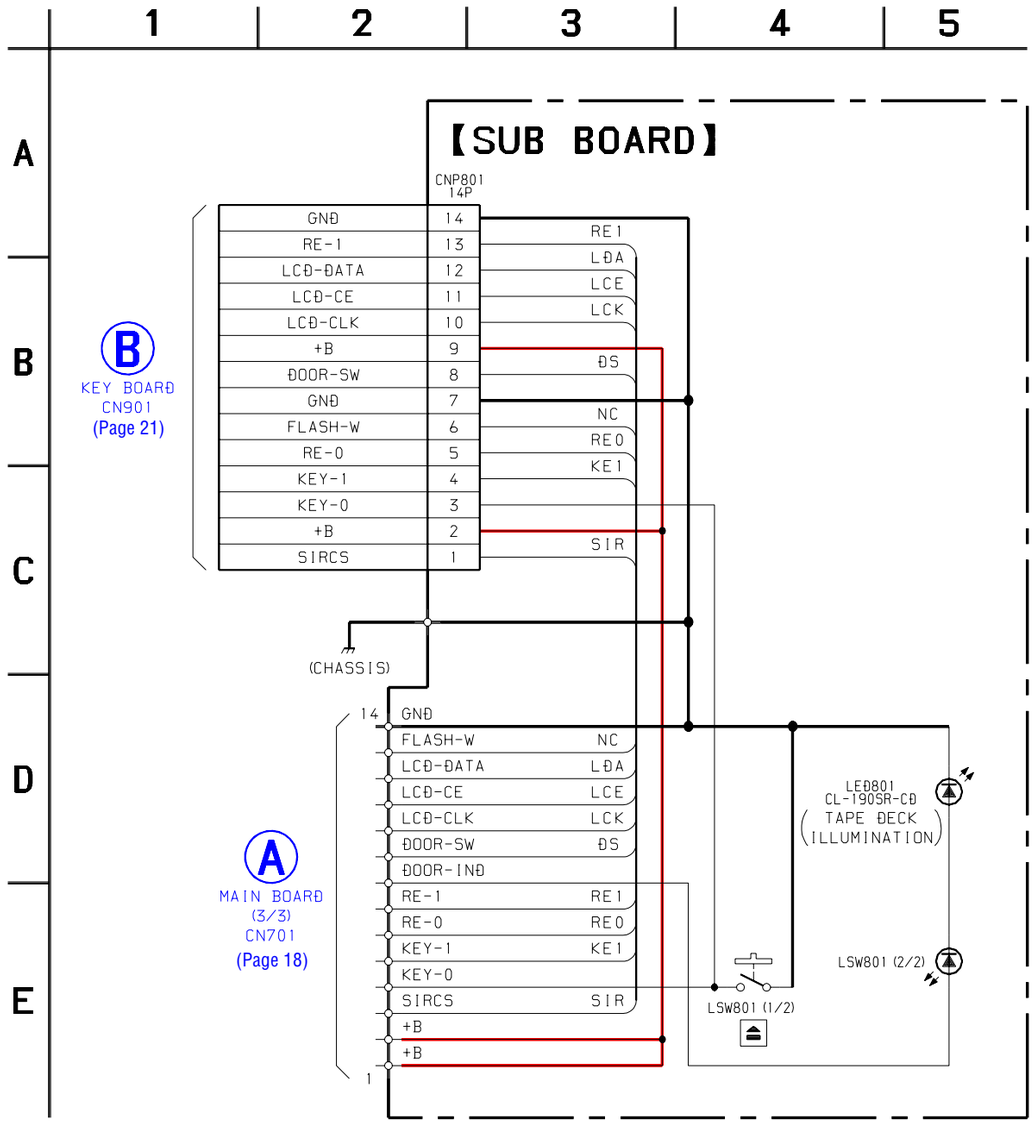
6-5. SCHEMATIC DIAGRAM – MAIN Board (3/3) – • See page 22 for IC Block Diagrams.



6-6. PRINTED WIRING BOARD – SUB Board –

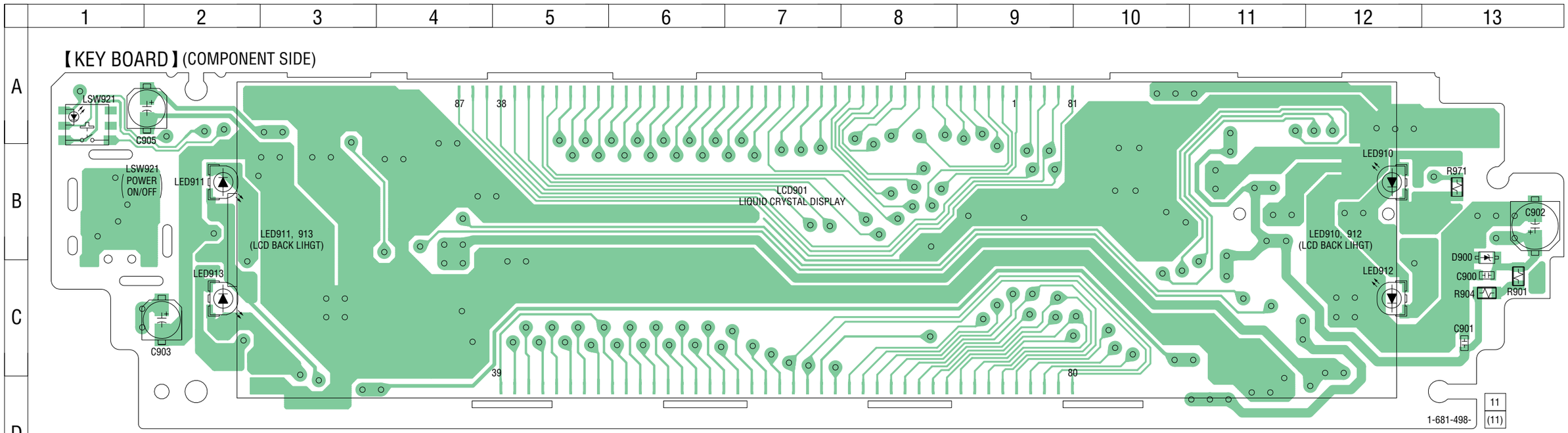


6-7. SCHEMATIC DIAGRAM – SUB Board –

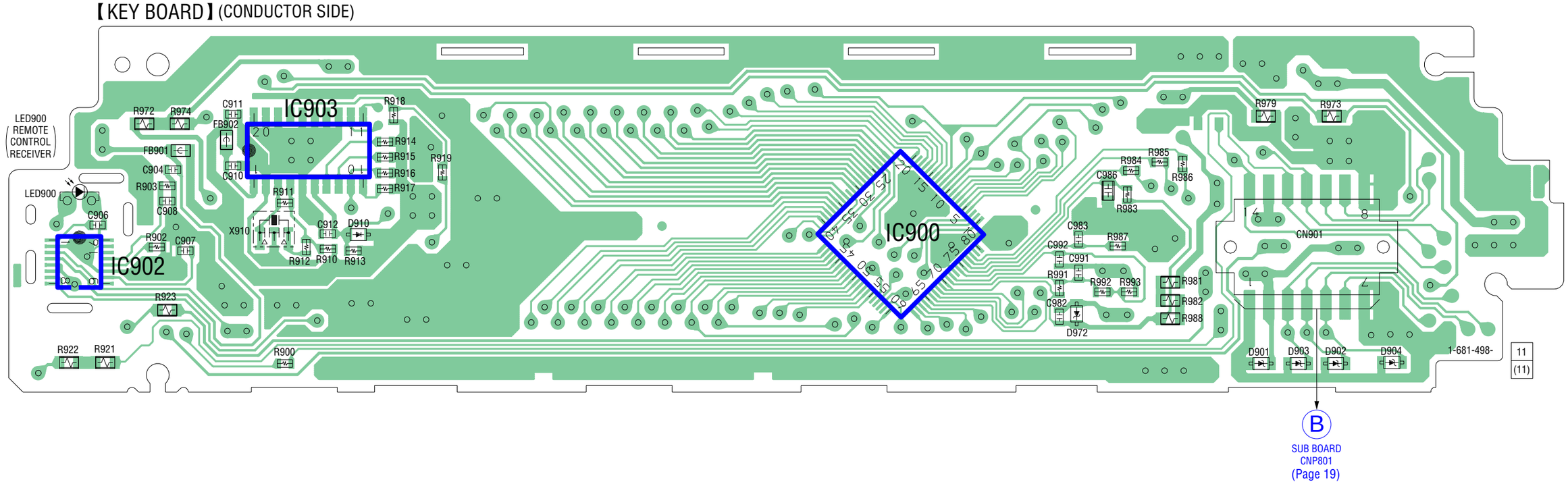


6-8. PRINTED WIRING BOARD – KEY Board –

【KEY BOARD】(COMPONENT SIDE)



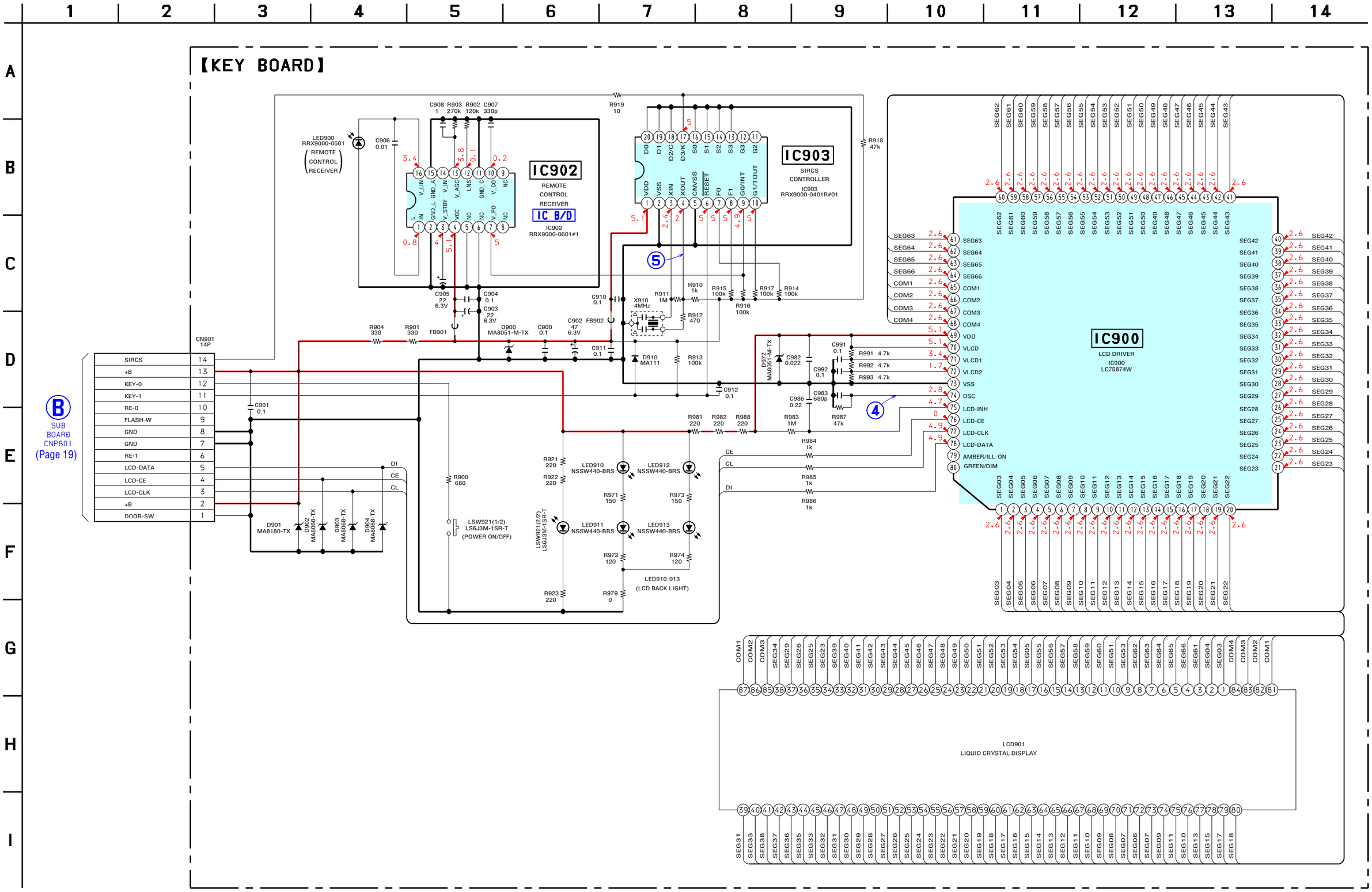
【KEY BOARD】(CONDUCTOR SIDE)



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D900	B-13	IC900	F-8
D901	G-11	IC902	F-1
D902	G-12	IC903	E-3
D903	G-12		
D904	G-12	LED900	F-1
D905	E-11	LED910	B-12
D910	F-4	LED911	B-2
D972	G-10	LED912	C-12
		LED913	C-2

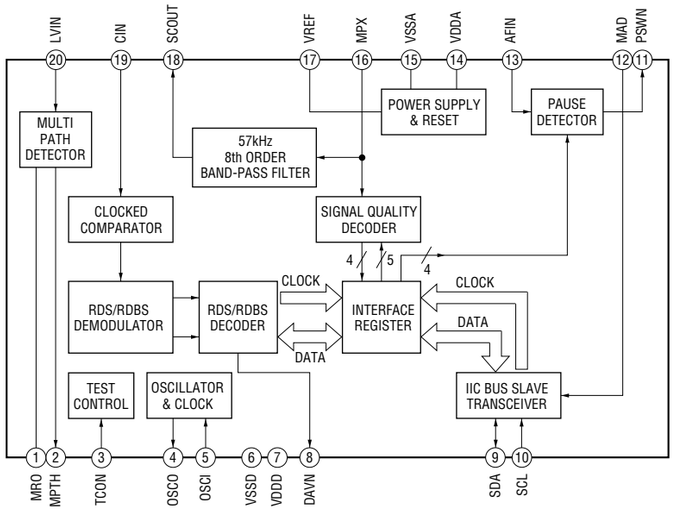
6-9. SCHEMATIC DIAGRAM – KEY Board – • See page 14 for Waveforms. • See page 23 for IC Block Diagram.



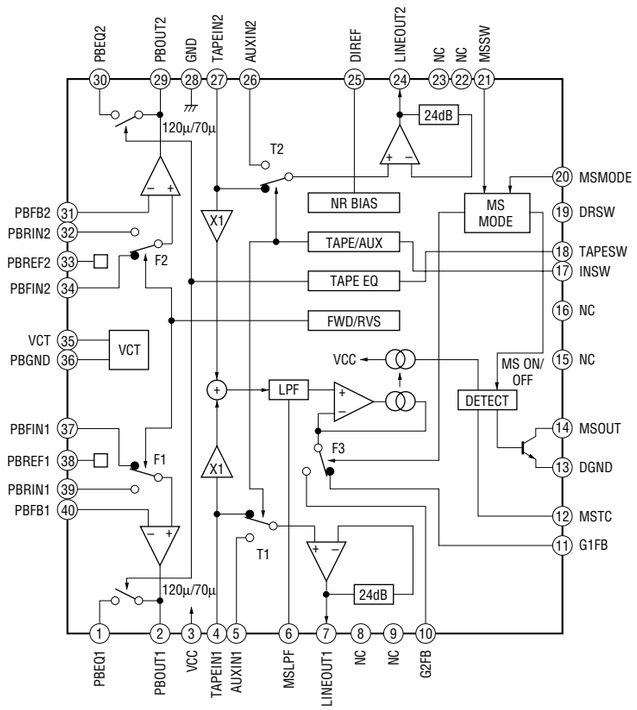
- **IC Block Diagrams**

– MAIN Board –

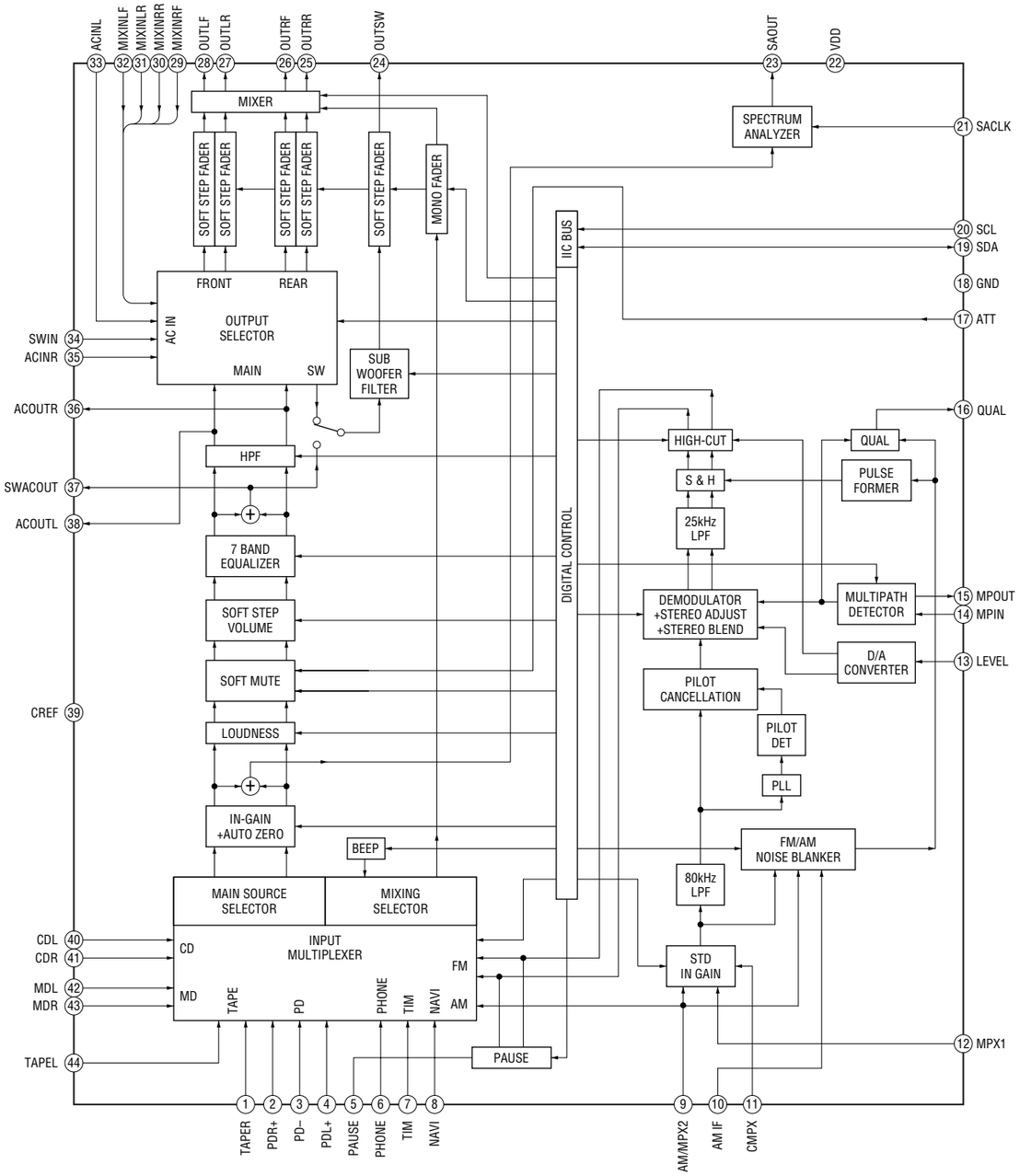
IC51 SAA6588T-118



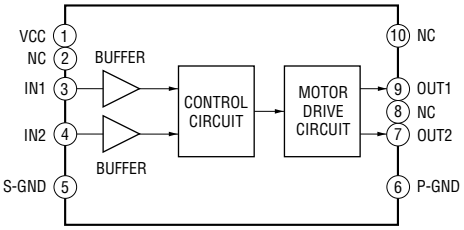
IC301 CXA2509AQ-T4



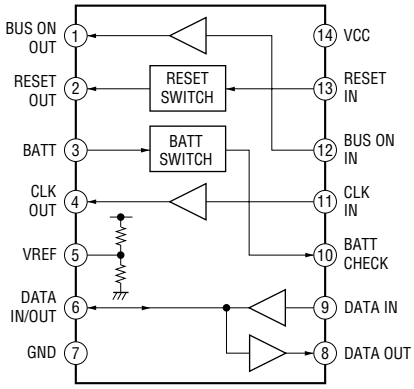
IC331 TDA7406T



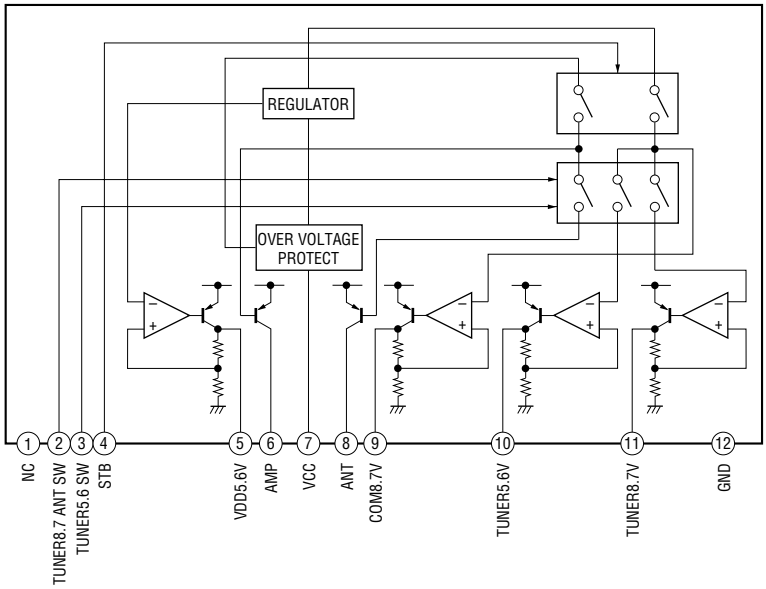
IC351 LB1930M-TLM



IC581 MM1175XFF

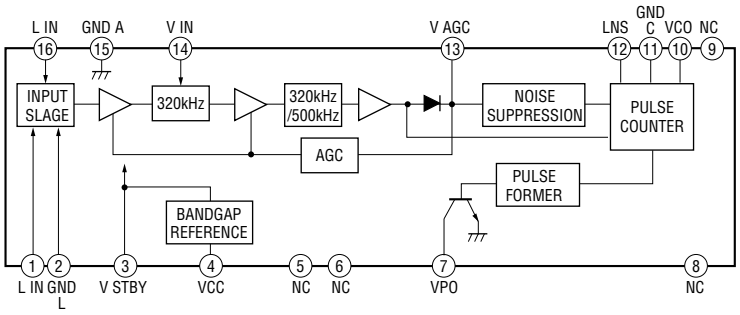


IC611 BA4908-V3



– KEY Board –

IC902 RRX9000-0601#1



6-10. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 MN101C49KTF (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VREF–	I	Reference voltage (0V) input terminal (for A/D converter)
2	VSM	I	FM and AM signal meter voltage detection signal input from the FM/AM tuner unit (TU1) (A/D input)
3	NIL	I	Not used (fixed at "L")
4	KEYIN1	I	Key input terminal (A/D input) LSW902, LSW905 to LSW911, S902 to S905 (MENU, SOUND, ENTER, S SCROLL, PTY D DISPLAY, LIST, AF, TA, > M SEEK+, . m SEEK–, DISC/PRESET+, DISC/PRESET– keys input) Fixed at "H" in this set
5	KEYIN0	I	Key input terminal (A/D input) LSW901, LSW903, LSW904, LSW914 to LSW919, S906, S907 (OFF, SOURCE, MODE ◄II►, SHUF 6, 5, 4, 3 REP, 2, 1 keys input)
6	RCIN0	I	Rotary remote commander key input terminal (A/D input)
7	QUALITY	I	Noise level detection signal input at SEEK mode (A/D input)
8	MPTH	I	Multi-path detection signal input from the RDS decoder (IC51) (A/D input)
9	DSTSEL	I	Destination setting terminal Fixed at "L" in this set
10	VREF+	I	Reference voltage (+5V) input terminal (for A/D converter)
11	VDD	—	Power supply terminal (+5V)
12	OSCOUT	O	Main system clock output terminal (18.432 MHz)
13	OSCIN	I	Main system clock input terminal (18.432 MHz)
14	VSS	—	Ground terminal
15	XI	I	Sub system clock input terminal (32.768 kHz)
16	XO	O	Sub system clock output terminal (32.768 kHz)
17	MMOD	I	Selection signal of memory mode input terminal "L": single chip mode (fixed at "L")
18	LCDSO	O	Serial data output to the liquid crystal display driver (IC900)
19	LCDCE	O	Chip enable signal output to the liquid crystal display driver (IC900) "H" active
20	LCDCKO	O	Serial data transfer clock signal output to the liquid crystal display driver (IC900)
21	NCO	O	Not used (open)
22	SIRCS_RESET	O	SIRCS reset signal output terminal
23	LCUBE_SEL	I	Destination setting terminal "H": L-cube model
24	$\overline{\text{SYSRST}}$	O	Reset signal output to the SONY bus interface (IC581) "L": reset
25	$\overline{\text{BUSON}}$	O	Bus on/off control signal output to the SONY bus interface (IC581) "L": bus on
26	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to accept function and eject keys in the power off status On at input of "H"
27	DAVN	I	Synchronized detection signal of RDS data block input from the RDS decoder (IC51) "H" active
28	BUIN	I	Battery detection signal input from the SONY bus interface (IC581) "L" is input at low voltage
29	SIRCS	I	SIRCS remote control signal input from the SIRCS controller (IC903)
30, 31	NIL	I	Not used (fixed at "L")
32	NIH	I	Not used (fixed at "H")
33	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC551) and reset switch (S551) "L": reset "L" is input for several 100 msec after power on, then it changes to "H"
34	TUNON	O	Tuner system power supply on/off control signal output "H": tuner power on
35	BEEP	O	Beep sound drive signal output to the power amplifier (IC751)
36	PW_ON	O	Main system power supply on/off control signal output "H": power on
37	NCO	I	Not used (open)
38	$\overline{\text{ACCIN}}$	I	Accessory detection signal input "L": accessory on
39	NCO	O	Not used (open)

Pin No.	Pin Name	I/O	Description
40	TELATT	I	Telephone attenuate signal input At input of "H", the signal is attenuated by –20 dB
41	NIH	I	Not used (fixed at "H")
42	BUSSO	O	Serial data output to the SONY bus interface (IC581)
43	BUSSI	I	Serial data input from the SONY bus interface (IC581)
44	BUSCKO	O	Serial data transfer clock signal output to the SONY bus interface (IC581)
45	IIC SIO	I/O	Two-way data IIC bus with the FM/AM tuner unit (TU1), RDS decoder (IC51) and electrical volume (IC331)
46	NCO	O	Not used (open)
47	IIC CKO	O	IIC bus clock signal output to the FM/AM tuner unit (TU1), RDS decoder (IC51) and electrical volume (IC331)
48	AMPON	O	Standby on/off control signal output to the power amplifier (IC751) "L": standby mode, "H": amplifier on
49	$\overline{\text{AMPATT}}$	O	Muting on/off control signal output to the power amplifier (IC751) "L": muting on
50	ATT	O	Audio line muting on/off control signal output "H": muting on
51	NCO	O	Not used (open)
52	$\overline{\text{AMSON}}$	O	Tape auto music sensor control signal output to the CXA2509AQ (IC301) "L": auto music sensor on
53	F/ROUT	O	Forward/reverse control signal output to the CXA2509AQ (IC301) "L": reverse direction, "H": forward direction
54	MTLON	O	METAL control in/out terminal At initial mode: valid/invalid selection input of METAL function (valid at "L" input) At normal mode: METAL on/off control signal output to the CXA2509AQ (IC301) (METAL on at "H" output)
55	TAPATT	O	Tape muting on/off control signal output to the CXA2509AQ (IC301) "H": muting on Active at ATA, FF/REW mode
56	NCO	I/O	Dolby control in/out terminal Not used (pull down)
57	AMSIN	I	Whether a music is present or not from CXA2509AQ (IC301) is detected at auto music sensor "L": music is present, "H": music is not present
58	4VPRE	I	4V PREOUT setting terminal "L": 4V PREOUT on Fixed at "H" in this set
59	$\overline{\text{VOLATT}}$	O	Pre amplifier muting on/off control signal output to the electrical volume (IC331) "L": muting on
60 to 64	NCO	O	Not used (open)
65	FL_W	I	Internal flash memory data write mode detection signal input terminal "L": data write mode Not used (open)
66	$\overline{\text{TESTIN}}$	I	Setting terminal for the test mode "L": test mode, normally fixed at "H"
67	RCIN1	I	Rotary remote commander shift key input terminal "L": shift key on
68 to 73	NCO	O	Not used (open)
74	EEP SIO	I/O	Two-way data bus for tuner EEPROM with the FM/AM tuner unit (TU1)
75	EEP CKO	I/O	Two-way bus clock signal for tuner EEPROM with the FM/AM tuner unit (TU1)
76	COLSEL	I	Setting terminal for the illumination color "L": amber, "H": green Fixed at "L" in this set
77	NCO	O	Not used (open)
78	$\overline{\text{DOORSW}}$	I	Front panel open/close detection signal input "L" is input when the front panel is closed
79	DOORIND	O	LED drive signal output of the MD disc slot illumination and ⏏ indicator (LED810, LSW810) "H": LED on "H" is output to turn on the LED when front panel is opened
80, 81	RE IN1, RE IN0	I	Dial pulse input of the rotary encoder (RE901) (for VOLUME control)
82	$\overline{\text{AD ON}}$	O	A/D converter power control signal output terminal When the KEYACK (pin ㉖) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input

Pin No.	Pin Name	I/O	Description
83	ILLON	O	Power on/off control signal output of the illumination LED and liquid crystal display driver (IC900) "H": power on
84	REL	I	Rotation detection signal input from supply reel sensor and take-up reel sensor on the mechanism deck
85	POS3	I	Tape position (EJECT/FF/REW/REV/ FWD mode) detect input from the tape operation switch on the deck mechanism POS3: "L": REV and EJECT mode, "H": others mode POS2: "L": REW mode, "H": others mode POS0: "L": EJECT mode, "H": others mode POS1: "L": PLAY and FF in FWD mode, and REW in REV mode, "H": others mode
86	POS2	I	
87	POS0	I	
88	POS1	I	
89	LMLOD	O	Motor drive signal output to the loading motor drive (IC351) "H" active (For the loading direction and forward side operation) *1
90	LMEJ	O	Motor drive signal output to the loading motor drive (IC351) "H" active (For the eject direction and reverse side operation) *1
91	TAPEON	O	Power on/off control signal output of the loading motor drive (IC351) and capstan/reel motor (M901) "H": motor on
92	CMON	O	Capstan/reel motor (M901) drive signal output terminal "H": motor on
93	$\overline{\text{NOSESW}}$	I	Front panel block remove/attach detection signal input from the nose detection switch (S552) "L": front panel is attached, "H": front panel is removed
94	NS_MASK	O	Discharge control signal output for the noise detection circuit "H": discharge
95	DAVSS	—	Ground terminal (for D/A converter)
96 to 99	NCO	O	Not used (open)
100	DAVCC	—	Power supply terminal (+5V) (for D/A converter)

*1 Loading motor control

Mode / Terminal	STOP	LOADING/ FORWARD	EJECT/ REVERSE	BRAKE
LMLOD (pin ⑧⑨)	"L"	"H"	"L"	"H"
LMEJ (pin ⑨⓪)	"L"	"L"	"H"	"H"

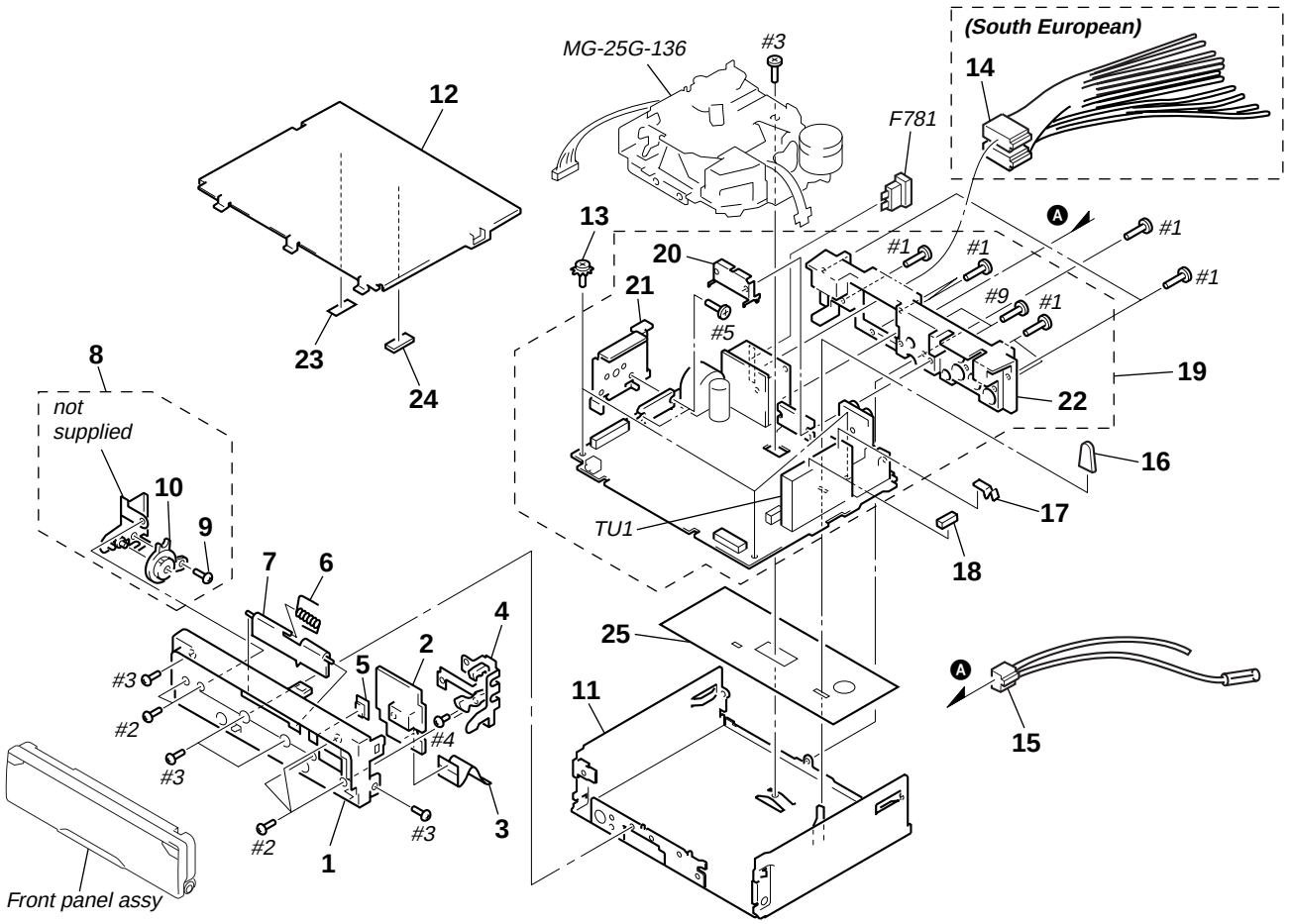
• **KEY BOARD IC903 RRX9000-0401R#01 (SIRCS CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power supply terminal (+5V)
2	VSS	—	Ground terminal
3	XIN	I	System clock input terminal (4 MHz)
4	XOUT	O	System clock output terminal (4 MHz)
5	CNVSS	—	Ground terminal
6	$\overline{\text{RESET}}$	I	Reset signal input trminal "L": reset
7, 8	F0, F1	—	Not used
9	SIRCS IN	I	SIRCS signal input from the remote control receiver (IC902)
10	G1/INT	—	Not used
11, 12	G2, G3	—	Not used (open)
13 to 16	S3 to S0	—	Not used (fixed at "L")
17	SIRCS OUT	O	SIRCS signal output to the system controller (IC501)
18 to 20	D2/C, D1, D0	—	Not used (fixed at "L")

SECTION 7
EXPLODED VIEWS

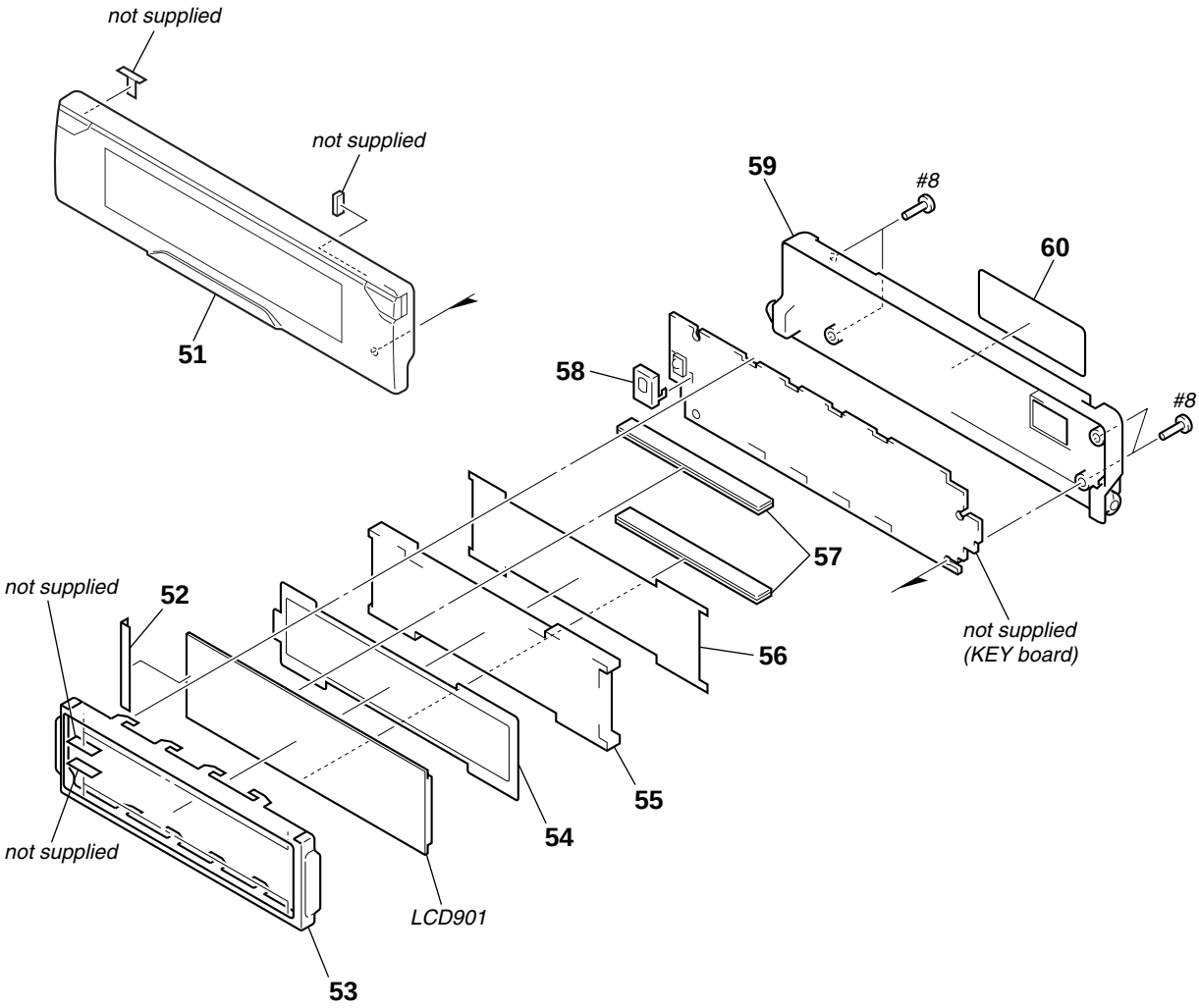
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

7-1. GENERAL SECTION



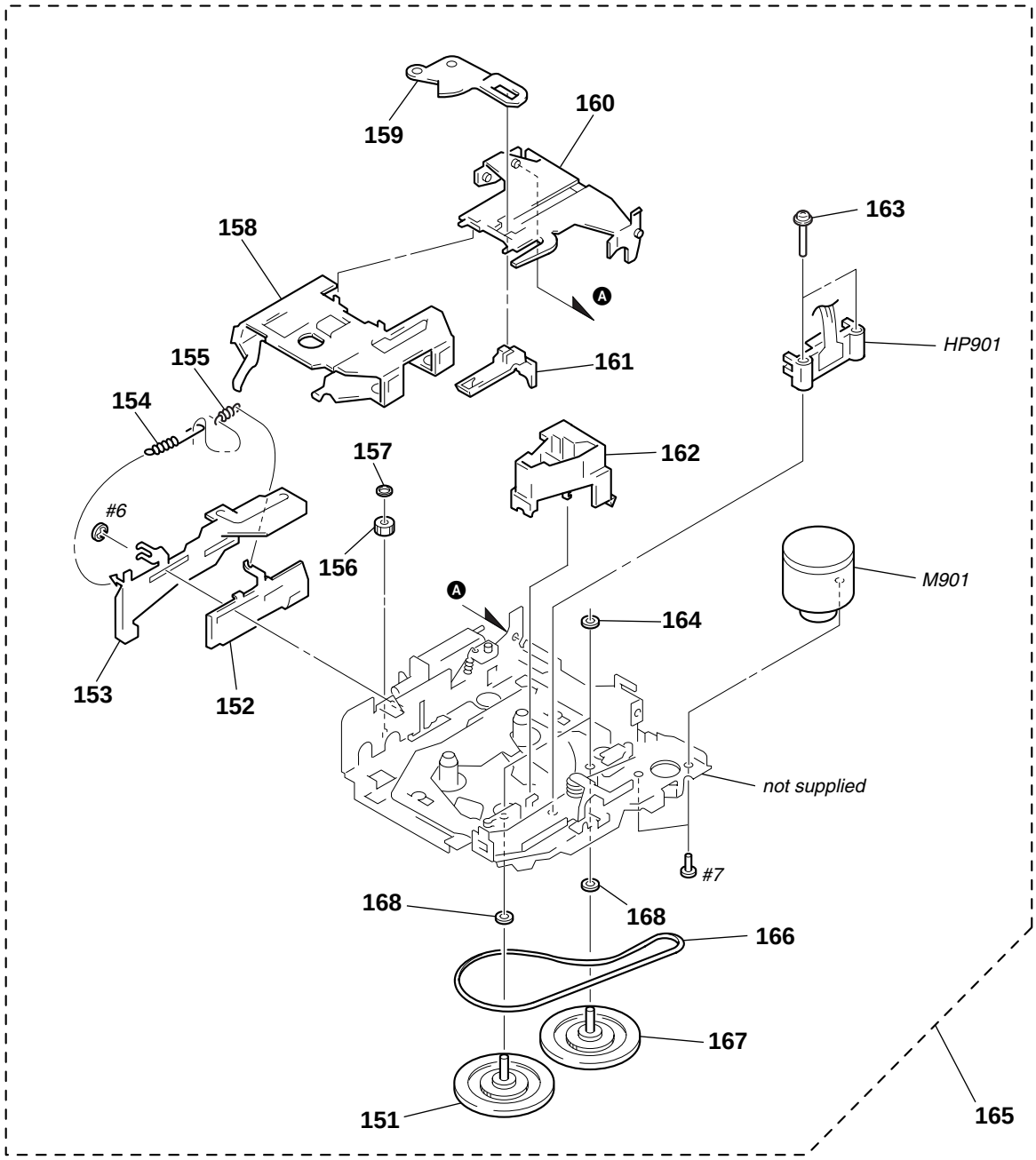
Ref. No.	Part No.	Description	Remark
1	X-3378-397-1	PANEL ASSY, SUB	
* 2	1-676-603-21	SUB BOARD	
3	1-792-195-11	CABLE, FLEXIBLE FLAT (14 CORE)	
4	X-3377-621-1	LOCK ASSY	
5	3-040-990-01	BUTTON (EJECT) (⏏)	
6	3-935-003-01	SPRING, TORSION	
7	3-027-437-11	DOOR, CASSETTE	
8	X-3376-699-1	GEAR ASSY	
9	3-713-786-51	SCREW +P 2X3	
10	3-030-909-01	DAMPER, OIL	
* 11	3-040-994-01	CHASSIS	
* 12	3-040-995-01	COVER	
13	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
14	1-782-381-11	CORD (WITH CONNECTOR) (ISO P&S) (POWER) (South European)	
15	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
16	3-012-859-01	CAP (25), RUBBER	
* 17	3-045-878-01	PLATE (TU), GROUND	
* 18	3-045-877-01	CUSHION (TU)	
19	A-3340-041-A	MAIN BOARD, COMPLETE	
* 20	3-040-998-01	BRACKET (IC)	
* 21	3-041-262-01	HEAT SINK (REG/XR)	
* 22	3-041-014-11	HEAT SINK (ISO2P)	
* 23	3-046-990-01	SPACER (COVER L)	
* 24	3-046-991-01	SPACER (COVER R)	
* 25	3-045-828-01	INSULATED PLATE	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
TU1	A-3282-061-A	FM/AM TUNER UNIT (TUX-020)	

7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-3380-575-1	PANEL ASSY (SVX), FRONT	
* 52	3-230-625-01	SHEET	
* 53	3-227-279-01	PLATE (LCD), GROUND	
* 54	3-227-283-01	SHEET (ILLUMINATOR)	
* 55	3-227-278-01	PLATE (LCD), LIGHT GUIDE	
* 56	3-227-284-01	SHEET (REFLECTOR)	
57	1-694-780-11	CONDUCTIVE BOARD, CONNECTION	
* 58	3-227-280-01	CASE (IR-T), SHIELD	
59	X-3380-118-1	PANEL ASSY, FRONT BACK	
60	3-227-286-51	PLATE (FBP), ORNAMENTAL	
LCD901	1-804-388-11	DISPLAY PANEL, LIQUID CRYSTAL	

7-3. MECHANISM DECK SECTION (MG-25G-136)



Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	

Ref. No.	Part No.	Description	Remark
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3220-610-A	MECHANISM DECK ASSY	
166	3-017-302-01	BELT (25)	
167	3-026-636-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

SECTION 8
ELECTRICAL PARTS LIST

KEY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
	1-694-780-11	CONDUCTIVE BOARD, CONNECTION			
*	3-227-278-01	PLATE (LCD), LIGHT GUIDE			
*	3-227-279-01	PLATE (LCD), GROUND			
*	3-227-280-01	CASE (IR-T), SHIELD			
*	3-227-281-01	CASE (IR-B), SHIELD			
*	3-227-283-01	SHEET (ILLUMINATOR)			
*	3-227-284-01	SHEET (REFLECTOR)			
*	3-227-285-01	INSULATED PLATE (IR)			
*	3-230-625-01	SHEET			
		< CAPACITOR >			
C900	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C901	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C902	1-135-853-11	ELECT CHIP	47uF	20%	6.3V
C903	1-135-852-11	ELECT CHIP	22uF	20%	6.3V
C904	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C905	1-135-852-11	ELECT CHIP	22uF	20%	6.3V
C906	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C907	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C908	1-115-156-11	CERAMIC CHIP	1uF		10V
C910	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C911	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C912	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C982	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C983	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C986	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C991	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C992	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN901	1-794-065-22	PLUG, CONNECTOR 14P			
		< DIODE >			
D900	8-719-420-90	DIODE MA8051-M-TX			
D901	8-719-017-94	DIODE MA8180-TX			
D902	8-719-017-58	DIODE MA8068-TX			
D903	8-719-017-58	DIODE MA8068-TX			
D904	8-719-017-58	DIODE MA8068-TX			
D910	8-719-404-50	DIODE MA111-TX			
D972	8-719-420-90	DIODE MA8051-M-TX			

Ref. No.	Part No.	Description			Remark
		< FERRITE BEAD >			
FB901	1-414-235-22	FERRITE	0uH		
FB902	1-414-235-22	FERRITE	0uH		
		< IC >			
IC900	8-759-826-21	IC LC75874W			
IC902	8-759-830-18	IC RRX9000-0601#1			
IC903	8-759-830-17	IC RRX9000-0401R#01			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-804-388-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< LED >			
LED900	8-719-083-14	LED RRX9000-0501 (REMOTE CONTROL RECEIVER)			
LED910	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)			
LED911	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)			
LED912	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)			
LED913	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)			
		< SWITCH >			
LSW921	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (POWER ON/OFF)			
		< RESISTOR >			
R900	1-216-819-11	METAL CHIP	680	5%	1/16W
R901	1-216-037-00	METAL CHIP	330	5%	1/10W
R902	1-216-846-11	METAL CHIP	120K	5%	1/16W
R903	1-216-850-11	METAL CHIP	270K	5%	1/16W
R904	1-216-037-00	METAL CHIP	330	5%	1/10W
R910	1-216-821-11	METAL CHIP	1K	5%	1/16W
R911	1-216-857-11	METAL CHIP	1M	5%	1/16W
R912	1-216-817-11	METAL CHIP	470	5%	1/16W
R913	1-216-845-11	METAL CHIP	100K	5%	1/16W
R914	1-216-845-11	METAL CHIP	100K	5%	1/16W
R915	1-216-845-11	METAL CHIP	100K	5%	1/16W
R916	1-216-845-11	METAL CHIP	100K	5%	1/16W
R917	1-216-845-11	METAL CHIP	100K	5%	1/16W
R918	1-216-841-11	METAL CHIP	47K	5%	1/16W
R919	1-216-797-11	METAL CHIP	10	5%	1/16W
R921	1-216-033-00	METAL CHIP	220	5%	1/10W
R922	1-216-033-00	METAL CHIP	220	5%	1/10W
R923	1-216-033-00	METAL CHIP	220	5%	1/10W

KEY MAIN

Ref. No.	Part No.	Description			Remark
R971	1-216-029-00	METAL CHIP	150	5%	1/10W
R972	1-216-027-00	METAL CHIP	120	5%	1/10W
R973	1-216-029-00	METAL CHIP	150	5%	1/10W
R974	1-216-027-00	METAL CHIP	120	5%	1/10W
R979	1-216-295-11	SHORT	0		
R981	1-216-033-00	METAL CHIP	220	5%	1/10W
R982	1-216-033-00	METAL CHIP	220	5%	1/10W
R983	1-216-857-11	METAL CHIP	1M	5%	1/16W
R984	1-216-821-11	METAL CHIP	1K	5%	1/16W
R985	1-216-821-11	METAL CHIP	1K	5%	1/16W
R986	1-216-821-11	METAL CHIP	1K	5%	1/16W
R987	1-216-841-11	METAL CHIP	47K	5%	1/16W
R988	1-216-033-00	METAL CHIP	220	5%	1/10W
R991	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R992	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R993	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
		< VIBRATOR >			
X910	1-781-646-21	VIBRATOR, CERAMIC (4MHz)			

****

	A-3340-041-A	MAIN BOARD, COMPLETE			
		**********			
*	3-040-998-01	BRACKET (IC)			
*	3-041-014-11	HEAT SINK (IS02P)			
*	3-041-262-01	HEAT SINK (REG/XR)			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C1	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C2	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C3	1-104-664-11	ELECT	47uF	20%	16V
C4	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C5	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C6	1-124-589-11	ELECT	47uF	20%	16V
C7	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C13	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C14	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C22	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C23	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C24	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C52	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C53	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C54	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C55	1-124-589-11	ELECT	47uF	20%	16V
C57	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C58	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C59	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C60	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C61	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C62	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C63	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C64	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C90	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C92	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C93	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C94	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C95	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C96	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C97	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C98	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C99	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C103	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C104	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C105	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C106	1-126-160-11	ELECT	1uF	20%	50V
C141	1-126-160-11	ELECT	1uF	20%	50V
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C171	1-124-233-11	ELECT	10uF	20%	16V
C174	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C175	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C181	1-124-233-11	ELECT	10uF	20%	16V
C183	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C184	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C185	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C191	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C203	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C204	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C205	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C206	1-126-160-11	ELECT	1uF	20%	50V
C208	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C241	1-126-160-11	ELECT	1uF	20%	50V
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C271	1-124-233-11	ELECT	10uF	20%	16V
C274	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C275	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C281	1-124-233-11	ELECT	10uF	20%	16V
C283	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C284	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C285	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C302	1-131-353-00	TANTALUM	10uF	10%	35V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C304	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C306	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C307	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C309	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C310	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C311	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C312	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C313	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C332	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C333	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C335	1-124-233-11	ELECT	10uF	20%	16V
C336	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C337	1-124-584-00	ELECT	100uF	20%	10V
C340	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C351	1-165-319-11	CERAMIC CHIP	0.1uF		50V

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Ref. No.	Part No.	Description			Remark
C352	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C353	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C354	1-124-233-11	ELECT	10uF	20%	16V
C355	1-124-234-00	ELECT	22uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C357	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C358	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C501	1-124-589-11	ELECT	47uF	20%	16V
C503	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C504	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C505	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C506	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C507	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C511	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C551	1-125-710-11	DOUBLE LAYER	0.1F		5.5V
C552	1-126-934-11	ELECT	220uF	20%	16V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C571	1-126-160-11	ELECT	1uF	20%	50V
C581	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C585	1-126-933-11	ELECT	100uF	20%	16V
C611	1-126-157-11	ELECT	10uF	20%	16V
C615	1-126-157-11	ELECT	10uF	20%	16V
C616	1-126-157-11	ELECT	10uF	20%	16V
C617	1-126-157-11	ELECT	10uF	20%	16V
C622	1-124-589-11	ELECT	47uF	20%	16V
C752	1-136-165-00	FILM	0.1uF	5%	50V
C754	1-124-233-11	ELECT	10uF	20%	16V
C755	1-126-157-11	ELECT	10uF	20%	16V
C781	1-107-885-11	ELECT	3300uF	20%	16V
C782	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C783	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C785	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C901	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C902	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C904	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C905	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C907	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C908	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C909	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN301	1-785-694-11	CONNECTOR, FFC/FPC 7P			
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN581	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
CN701	1-784-456-11	CONNECTOR, FFC/FPC 14P			
CN781	1-794-070-12	PIN, CONNECTOR (ISO)			
		< JACK >			
CNJ151	1-774-699-12	JACK, PIN 4P (AUDIO OUT REAR, BUS AUDIO IN)			
		< DIODE >			
D1	8-719-056-65	DIODE 1SS372-TE85L			
D51	8-719-404-50	DIODE MA111-TX			
D55	8-719-404-50	DIODE MA111-TX			
D90	8-719-404-50	DIODE MA111-TX			
D91	8-719-404-50	DIODE MA111-TX			

Ref. No.	Part No.	Description	Remark
D92	8-719-976-99	DIODE UDZ-TE-17-5.1B	
D351	8-719-977-22	DIODE UDZ-TE-17-9.1B	
D352	8-719-970-02	DIODE 1SR139-400T-32	
D502	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D552	8-719-067-56	DIODE MA112-TX	
D553	8-719-404-50	DIODE MA111-TX	
D581	8-719-056-93	DIODE UDZ-TE-17-18B	
D582	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D585	8-719-072-70	DIODE MA2ZD14001S0	
D586	8-719-056-93	DIODE UDZ-TE-17-18B	
D610	8-719-970-02	DIODE 1SR139-400T-32	
D611	8-719-970-02	DIODE 1SR139-400T-32	
D614	8-719-970-02	DIODE 1SR139-400T-32	
D622	8-719-404-50	DIODE MA111-TX	
D701	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D702	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D703	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D704	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D705	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D706	8-719-056-93	DIODE UDZ-TE-17-18B	
D707	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D708	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D709	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D710	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D711	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D712	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D721	8-719-079-42	DIODE 1ZB22 (TPA3)	
D722	8-719-079-42	DIODE 1ZB22 (TPA3)	
D723	8-719-079-42	DIODE 1ZB22 (TPA3)	
D724	8-719-079-42	DIODE 1ZB22 (TPA3)	
D731	8-719-079-42	DIODE 1ZB22 (TPA3)	
D732	8-719-079-42	DIODE 1ZB22 (TPA3)	
D733	8-719-079-42	DIODE 1ZB22 (TPA3)	
D734	8-719-079-42	DIODE 1ZB22 (TPA3)	
D781	8-719-049-38	DIODE 1N5404TU	
		< IC >	
IC51	8-759-492-59	IC SAA6588T/V2-118	
IC90	8-759-100-96	IC uPC4558G2-E1	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC331	8-759-827-13	IC TDA7406T	
IC351	8-759-527-33	IC LB1930M-TLM	
IC501	8-759-828-85	IC MN101C49KTF	
IC551	8-759-682-69	IC XC61CN4302MR	
IC581	8-759-096-16	IC MM1175XFF	
IC611	8-759-661-47	IC BA4908-V3	
IC751	8-759-827-14	IC TA8268AH	
		< JACK >	
J1	1-815-185-11	JACK (ANT) (FM/AM ANTENNA IN)	
J561	1-566-822-41	JACK (REMOTE IN)	
		< SHORT >	
JC3	1-216-295-11	SHORT 0	
JC4	1-216-296-11	SHORT 0	
JC5	1-216-296-11	SHORT 0	
JC6	1-216-296-11	SHORT 0	
JC7	1-216-296-11	SHORT 0	

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Ref. No.	Part No.	Description		Remark
JC8	1-216-296-11	SHORT	0	
JC9	1-216-296-11	SHORT	0	
JC10	1-216-295-11	SHORT	0	
JC11	1-216-295-11	SHORT	0	
JC12	1-216-296-11	SHORT	0	
JC14	1-216-296-11	SHORT	0	
JC15	1-216-296-11	SHORT	0	
JC17	1-216-296-11	SHORT	0	
JC18	1-216-295-11	SHORT	0	
JC51	1-216-296-11	SHORT	0	
JC53	1-216-296-11	SHORT	0	
JC90	1-216-295-11	SHORT	0	
JC91	1-216-296-11	SHORT	0	
JC301	1-216-295-11	SHORT	0	
JC302	1-216-295-11	SHORT	0	
JC331	1-216-295-11	SHORT	0	
JC332	1-216-296-11	SHORT	0	
JC333	1-216-296-11	SHORT	0	
JC351	1-216-295-11	SHORT	0	
JC352	1-216-295-11	SHORT	0	
JC353	1-216-295-11	SHORT	0	
JC354	1-216-295-11	SHORT	0	
JC500	1-216-295-11	SHORT	0	
JC501	1-216-296-11	SHORT	0	
JC502	1-216-296-11	SHORT	0	
JC558	1-216-295-11	SHORT	0	
JC565	1-216-295-11	SHORT	0	
JC581	1-216-295-11	SHORT	0	
JC588	1-216-295-11	SHORT	0	
JC622	1-216-295-11	SHORT	0	
JC623	1-216-295-11	SHORT	0	
JC751	1-216-296-11	SHORT	0	
JC752	1-216-296-11	SHORT	0	
JC753	1-216-295-11	SHORT	0	
JC754	1-216-296-11	SHORT	0	
JC755	1-216-296-11	SHORT	0	
JC759	1-216-296-11	SHORT	0	
JC761	1-216-295-11	SHORT	0	
JC762	1-216-295-11	SHORT	0	
JC763	1-216-296-11	SHORT	0	
JC764	1-216-296-11	SHORT	0	
JC765	1-216-295-11	SHORT	0	
JC766	1-216-296-11	SHORT	0	
JC767	1-216-295-11	SHORT	0	
JC902	1-216-295-11	SHORT	0	
		< COIL >		
L501	1-410-501-11	INDUCTOR	2.2uH	
L502	1-410-501-11	INDUCTOR	2.2uH	
L781	1-419-476-11	INDUCTOR	250uH	
		< TRANSISTOR >		
Q90	1-801-806-11	TRANSISTOR	DTC144EKA-T146	
Q91	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR	
Q171	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q181	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q271	8-729-920-21	TRANSISTOR	DTC314TK-T-146	
Q281	8-729-920-21	TRANSISTOR	DTC314TK-T-146	

Ref. No.	Part No.	Description			Remark
Q351	8-729-015-11	TRANSISTOR	2SD1802FAST-TL		
Q352	8-729-047-76	TRANSISTOR	FMC2A-T148		
Q353	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q354	8-729-106-60	TRANSISTOR	2SB1132-T100-R		
Q551	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q571	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR		
Q581	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q583	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR		
Q601	8-729-106-60	TRANSISTOR	2SB1132-T100-R		
Q602	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q621	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q622	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q631	8-729-047-76	TRANSISTOR	FMC2A-T148		
		< RESISTOR >			
R1	1-216-025-11	RES-CHIP	100	5%	1/10W
R2	1-216-025-11	RES-CHIP	100	5%	1/10W
R3	1-216-081-00	METAL CHIP	22K	5%	1/10W
R12	1-216-089-11	RES-CHIP	47K	5%	1/10W
R13	1-216-097-11	RES-CHIP	100K	5%	1/10W
R21	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R51	1-216-025-11	RES-CHIP	100	5%	1/10W
R52	1-216-025-11	RES-CHIP	100	5%	1/10W
R53	1-216-113-00	METAL CHIP	470K	5%	1/10W
R54	1-216-049-11	RES-CHIP	1K	5%	1/10W
R55	1-216-081-00	METAL CHIP	22K	5%	1/10W
R56	1-216-041-00	METAL CHIP	470	5%	1/10W
R59	1-216-001-00	METAL CHIP	10	5%	1/10W
R60	1-216-001-00	METAL CHIP	10	5%	1/10W
R90	1-216-097-11	RES-CHIP	100K	5%	1/10W
R91	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R92	1-216-025-11	RES-CHIP	100	5%	1/10W
R93	1-216-097-11	RES-CHIP	100K	5%	1/10W
R95	1-216-121-11	RES-CHIP	1M	5%	1/10W
R96	1-216-025-11	RES-CHIP	100	5%	1/10W
R97	1-216-073-00	RES-CHIP	10K	5%	1/10W
R98	1-216-073-00	RES-CHIP	10K	5%	1/10W
R99	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R100	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R101	1-216-041-00	METAL CHIP	470	5%	1/10W
R102	1-216-109-00	METAL CHIP	330K	5%	1/10W
R103	1-216-077-00	RES-CHIP	15K	5%	1/10W
R104	1-216-079-00	METAL CHIP	18K	5%	1/10W
R141	1-216-073-00	RES-CHIP	10K	5%	1/10W
R142	1-216-049-11	RES-CHIP	1K	5%	1/10W
R170	1-216-025-11	RES-CHIP	100	5%	1/10W
R171	1-216-025-11	RES-CHIP	100	5%	1/10W
R175	1-216-089-11	RES-CHIP	47K	5%	1/10W
R180	1-216-025-11	RES-CHIP	100	5%	1/10W
R181	1-216-025-11	RES-CHIP	100	5%	1/10W
R185	1-216-089-11	RES-CHIP	47K	5%	1/10W
R191	1-249-437-11	CARBON	47K	5%	1/4W
R192	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R201	1-216-041-00	METAL CHIP	470	5%	1/10W
R202	1-216-109-00	METAL CHIP	330K	5%	1/10W
R203	1-216-077-00	RES-CHIP	15K	5%	1/10W
R204	1-216-079-00	METAL CHIP	18K	5%	1/10W
R241	1-216-073-00	RES-CHIP	10K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
R242	1-216-049-11	RES-CHIP	1K	5%	1/10W
R270	1-216-025-11	RES-CHIP	100	5%	1/10W
R271	1-216-025-11	RES-CHIP	100	5%	1/10W
R275	1-216-089-11	RES-CHIP	47K	5%	1/10W
R280	1-216-025-11	RES-CHIP	100	5%	1/10W
R281	1-216-025-11	RES-CHIP	100	5%	1/10W
R285	1-216-089-11	RES-CHIP	47K	5%	1/10W
R301	1-216-079-00	METAL CHIP	18K	5%	1/10W
R302	1-216-097-11	RES-CHIP	100K	5%	1/10W
R303	1-216-063-00	RES-CHIP	3.9K	5%	1/10W
R304	1-216-077-00	RES-CHIP	15K	5%	1/10W
R305	1-216-001-00	METAL CHIP	10	5%	1/10W
R306	1-216-105-00	RES-CHIP	220K	5%	1/10W
R331	1-249-393-11	CARBON	10	5%	1/4W F
R332	1-216-089-11	RES-CHIP	47K	5%	1/10W
R335	1-216-025-11	RES-CHIP	100	5%	1/10W
R336	1-216-025-11	RES-CHIP	100	5%	1/10W
R351	1-216-049-11	RES-CHIP	1K	5%	1/10W
R352	1-249-383-11	CARBON	1.5	5%	1/6W F
R353	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R354	1-216-073-00	RES-CHIP	10K	5%	1/10W
R500	1-247-807-31	CARBON	100	5%	1/4W
R501	1-247-807-31	CARBON	100	5%	1/4W
R502	1-216-049-11	RES-CHIP	1K	5%	1/10W
R507	1-216-049-11	RES-CHIP	1K	5%	1/10W
R508	1-216-049-11	RES-CHIP	1K	5%	1/10W
R509	1-216-049-11	RES-CHIP	1K	5%	1/10W
R511	1-216-073-00	RES-CHIP	10K	5%	1/10W
R513	1-216-073-00	RES-CHIP	10K	5%	1/10W
R514	1-216-097-11	RES-CHIP	100K	5%	1/10W
R515	1-216-097-11	RES-CHIP	100K	5%	1/10W
R516	1-216-097-11	RES-CHIP	100K	5%	1/10W
R517	1-216-097-11	RES-CHIP	100K	5%	1/10W
R518	1-216-097-11	RES-CHIP	100K	5%	1/10W
R519	1-216-097-11	RES-CHIP	100K	5%	1/10W
R520	1-216-097-11	RES-CHIP	100K	5%	1/10W
R521	1-216-049-11	RES-CHIP	1K	5%	1/10W
R522	1-216-049-11	RES-CHIP	1K	5%	1/10W
R523	1-216-049-11	RES-CHIP	1K	5%	1/10W
R526	1-216-097-11	RES-CHIP	100K	5%	1/10W
R527	1-216-097-11	RES-CHIP	100K	5%	1/10W
R528	1-216-097-11	RES-CHIP	100K	5%	1/10W
R529	1-216-097-11	RES-CHIP	100K	5%	1/10W
R530	1-216-097-11	RES-CHIP	100K	5%	1/10W
R531	1-216-097-11	RES-CHIP	100K	5%	1/10W
R532	1-216-097-11	RES-CHIP	100K	5%	1/10W
R533	1-216-097-11	RES-CHIP	100K	5%	1/10W
R535	1-216-097-11	RES-CHIP	100K	5%	1/10W
R538	1-216-033-00	METAL CHIP	220	5%	1/10W
R539	1-216-033-00	METAL CHIP	220	5%	1/10W
R541	1-216-097-11	RES-CHIP	100K	5%	1/10W
R543	1-216-097-11	RES-CHIP	100K	5%	1/10W
R544	1-216-295-11	SHORT	0		
R545	1-216-025-11	RES-CHIP	100	5%	1/10W
R547	1-247-807-31	CARBON	100	5%	1/4W
R550	1-216-089-11	RES-CHIP	47K	5%	1/10W
R551	1-216-097-11	RES-CHIP	100K	5%	1/10W
R552	1-216-097-11	RES-CHIP	100K	5%	1/10W
R555	1-208-806-11	RES-CHIP	10K	0.5%	1/10W
R557	1-247-807-31	CARBON	100	5%	1/4W
R558	1-216-073-00	RES-CHIP	10K	5%	1/10W
R559	1-216-073-00	RES-CHIP	10K	5%	1/10W
R560	1-247-807-31	CARBON	100	5%	1/4W
R561	1-247-807-31	CARBON	100	5%	1/4W
R562	1-208-806-11	RES-CHIP	10K	0.5%	1/10W
R563	1-216-025-11	RES-CHIP	100	5%	1/10W
R564	1-216-025-11	RES-CHIP	100	5%	1/10W
R565	1-216-097-11	RES-CHIP	100K	5%	1/10W
R566	1-216-097-11	RES-CHIP	100K	5%	1/10W
R567	1-216-097-11	RES-CHIP	100K	5%	1/10W
R568	1-216-097-11	RES-CHIP	100K	5%	1/10W
R570	1-216-097-11	RES-CHIP	100K	5%	1/10W
R571	1-216-065-00	RES-CHIP	4.7K	5%	1/10W
R572	1-216-089-11	RES-CHIP	47K	5%	1/10W
R573	1-249-425-11	CARBON	4.7K	5%	1/4W F
R576	1-216-097-11	RES-CHIP	100K	5%	1/10W
R577	1-216-089-11	RES-CHIP	47K	5%	1/10W
R578	1-216-097-11	RES-CHIP	100K	5%	1/10W
R580	1-216-025-11	RES-CHIP	100	5%	1/10W
R581	1-216-049-11	RES-CHIP	1K	5%	1/10W
R582	1-216-077-00	RES-CHIP	15K	5%	1/10W
R583	1-216-025-11	RES-CHIP	100	5%	1/10W
R586	1-216-073-00	RES-CHIP	10K	5%	1/10W
R587	1-216-073-00	RES-CHIP	10K	5%	1/10W
R588	1-216-049-11	RES-CHIP	1K	5%	1/10W
R589	1-216-089-11	RES-CHIP	47K	5%	1/10W
R595	1-216-097-11	RES-CHIP	100K	5%	1/10W
R603	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R604	1-216-073-00	RES-CHIP	10K	5%	1/10W
R606	1-247-797-11	CARBON	39	5%	1/4W
R607	1-247-797-11	CARBON	39	5%	1/4W
R608	1-247-797-11	CARBON	39	5%	1/4W
R609	1-247-797-11	CARBON	39	5%	1/4W
R625	1-216-017-00	RES-CHIP	47	5%	1/10W
R631	1-216-033-00	METAL CHIP	220	5%	1/10W
R632	1-216-033-00	METAL CHIP	220	5%	1/10W
R633	1-216-033-00	METAL CHIP	220	5%	1/10W
R634	1-216-033-00	METAL CHIP	220	5%	1/10W
R635	1-216-033-00	METAL CHIP	220	5%	1/10W
R636	1-216-033-00	METAL CHIP	220	5%	1/10W
R701	1-216-025-11	RES-CHIP	100	5%	1/10W
R702	1-216-025-11	RES-CHIP	100	5%	1/10W
R751	1-249-417-11	CARBON	1K	5%	1/4W F
R753	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-216-198-00	RES-CHIP	1K	5%	1/8W
R757	1-216-198-00	RES-CHIP	1K	5%	1/8W
R758	1-216-198-00	RES-CHIP	1K	5%	1/8W
R760	1-216-198-00	RES-CHIP	1K	5%	1/8W
R901	1-249-417-11	CARBON	1K	5%	1/4W F

< SWITCH >

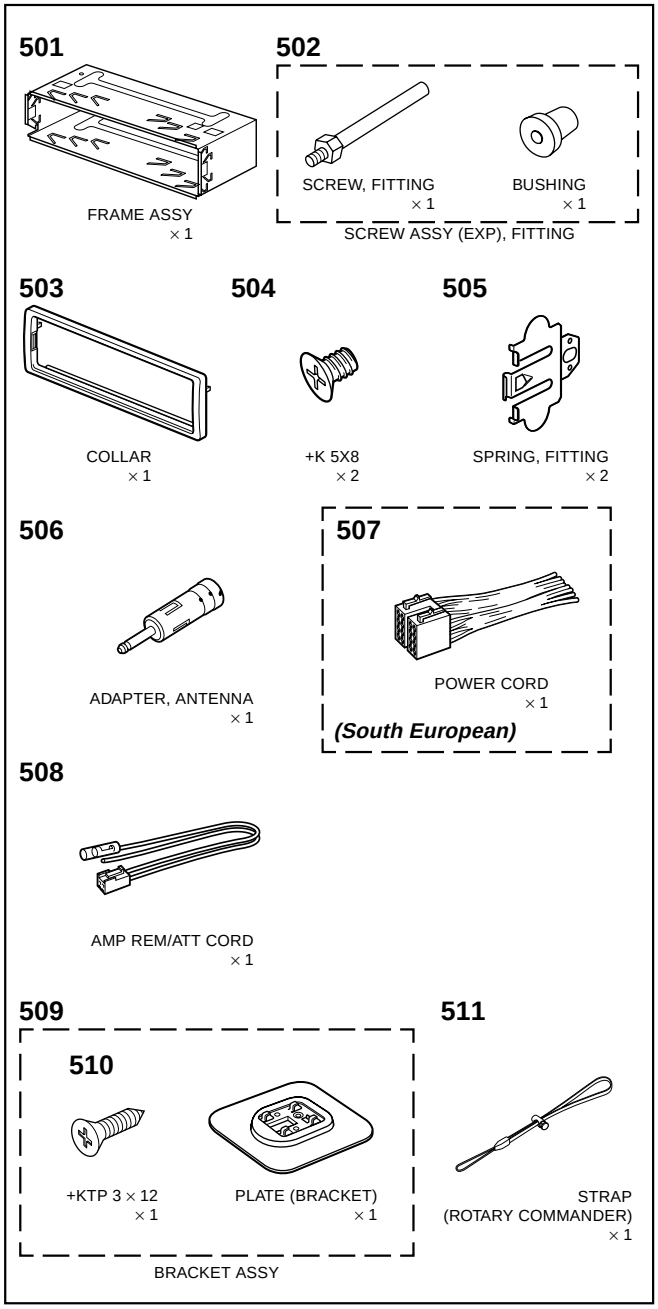
S551	1-692-431-21	SWITCH, TACTILE (RESET)
S552	1-771-540-11	SWITCH, PUSH (1 KEY) (NOSE DETECT)

MAIN **SUB**

Ref. No.	Part No.	Description	Remark
		< THERMISTOR >	
TH501	1-803-350-21	THERMISTOR, POSITIVE	
		< TUNER UNIT >	
TU1	A-3220-061-A	FM/AM TUNER UNIT (TUX-020)	
		< VIBRATOR >	
X51	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)	
X501	1-781-294-21	VIBRATOR, CRYSTAL (18.432MHz)	
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
**********			
*	1-676-603-21	SUB BOARD	
		**********	
	1-792-195-11	CABLE, FLEXIBLE FLAT (14 CORE)	
		< CONNECTOR >	
CNP801	1-794-064-12	SOCKET, CONNECTOR 14P	
		< LED >	
LED801	8-719-061-16	LED CL-190SR-CD-T	(TAPE DECK ILLUMINATION)
		< SWITCH >	
LSW801	1-771-883-11	SWITCH, TACTILE (WITH LED) (⏏)	
**********			
		MISCELLANEOUS	
		**********	
3	1-792-195-11	CABLE, FLEXIBLE FLAT (14 CORE)	
14	1-782-381-11	CORD (WITH CONNECTOR) (ISO P&S)	(POWER) (South European)
15	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
57	1-694-780-11	CONDUCTIVE BOARD, CONNECTION	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
LCD901	1-804-388-11	DISPLAY PANEL, LIQUID CRYSTAL	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#2	7-621-772-20	SCREW +B 2X5	
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-627-553-28	SCREW, PRECISION +P 2X2.5	
#5	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#6	7-624-104-04	STOP RING 2.0, TYPE -E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE3	
#8	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#9	7-685-795-09	SCREW +PTT 2.6X12 (S)	
**********			

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-476-547-11	WIRELESS REMOTE COMMANDER (RM-X116)	
	1-476-589-11	WIRELESS ROTARY COMMANDER (RM-X5S)	
	3-229-893-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH,	DUTCH, ITALIAN, GERMAN)
	3-229-893-21	MANUAL, INSTRUCTION (ENGLISH, SPANISH,	SWEDISH, PORTUGUESE, GREEK)
	3-229-893-31	MANUAL, INSTRUCTION (ENGLISH, CZECH,	POLISH, TURKISH, RUSSIAN)
	3-229-894-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	FRENCH, DUTCH, ITALIAN, GERMAN)
	3-229-894-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	SPANISH, SWEDISH, PORTUGUESE, GREEK)
	3-229-894-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH,	CZECH, POLISH, TURKISH, RUSSIAN)
	3-230-549-01	HOLDER, BATTERY (for RM-X116)	
	3-231-381-01	STRAP (ROTARY COMMANDER) (for RM-X5S)	
	X-3378-490-1	CASE (PANEL) ASSY (for FRONT PANEL)	
**********			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	X-3373-602-1	FRAME ASSY	
502	X-3366-405-1	SCREW ASSY (EXP), FITTING	
503	3-040-979-01	COLLAR	
504	3-934-325-01	SCREW, +K (5X8) TAPPING	
505	3-233-644-01	SPRING, FITTING	
506	1-465-459-21	ADAPTER, ANTENNA	
507	1-782-381-11	CORD (WITH CONNECTOR) (ISO P&S) (POWER) (South European)	
508	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
509	X-3373-432-1	BRACKET ASSY	
510	7-685-248-14	SCREW +KTP 3X12 TYPE4	
511	3-231-381-01	STRAP (ROTARY COMMANDER)	



REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.05	Change of Part No. for SPRING, FITTING (ECN-CSA04727)
1.0	2001.04	New